

# CERTIFICATE

Certificate Number: 111045.000  
Including Seven Page Addendum

The Quality Management System and implementation of:

## CommScope, Inc.

With Virtual Central Function at:  
1100 CommScope Place SE  
Hickory, NC 28602  
United States

meets the requirements of the standard:

## ISO 9001:2015

### Scope:

The sales, marketing, design, manufacture, test, repair, support, service, and distribution of telecommunications products, components, and services for the telecommunications, wireless, and broadcast networks industries

Certificate Expires: January 04, 2026  
Certificate Issued: January 05, 2023  
Certified Since: January 10, 2001

Business Segments	Exceptions
Connectivity and Cable Solutions (CCS)	None
Networking, Intelligent Cellular & Security Solutions (NICS)	None
Outdoor Wireless Networks (OWN)	None
Access Network Solutions (ANS)	None



Dr. Cem O. Onus  
Managing Director

DEKRA Certification, Inc.  
1945 The Exchange SE #300  
Atlanta, GA 30339 USA  
(215) 997-4519  
<https://www.dekra.us/en/audits/>





# CERTIFICATE ADDENDUM

Certificate Number: 111045.000  
ADDENDUM Page One of Seven

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**ISO 9001:2015**

<b>Site Activities Legend:</b>	HQ = Headquarters	MFG = Manufacturing	SER = Services (Professional Services and/or Technical Support)
	HW DE= Hardware Development	REP = Repair	SC = Purchasing, Supplier Management, Manufacturing Support, Repair Support
	SW DE= Software Development	SAL = Sales, Marketing	DIST = Distribution

<b>Site Address</b>	<b>Site Activities</b>
CommScope Inc 1100 CommScope Place SE Hickory, NC 28602 United States	HQ (Virtual)
ARRIS Technology, Inc. 3871 Lakefield Drive Suwanee, GA 30024 United States	HW & SW DE, SAL, SER, SC
ARRIS Technology, Inc. 101 Tournament Dr. Horsham, PA, 19044 United States	HW & SW DE, SAL, SER, SC
ARRIS Technology, Inc. 6450 Sequence Drive San Diego, CA 92121 United States	SW DE, SER
ARRIS Technology, Inc. 900 Chelmsford St. Lowell, MA 01851 United States	HW & SW DE, SER, SC

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# CERTIFICATE ADDENDUM

Certificate Number: 111045.000  
ADDENDUM Page Two of Seven

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**ISO 9001:2015**

Site Address	Site Activities
ARRIS Solutions, Inc. 2400 Ogden Ave., Suite 180 Lisle, IL 60532 United States	HW & SW DE, SAL, SER, SC
ARRIS 15 Sterling Drive Wallingford, CT 06492 United States	HW & SW DE, SER, SC
ARRIS Technology, Inc. 2450/2500 Walsh Avenue Santa Clara, CA 95051 United States	HW & SW DE, SAL, SER
Ruckus Wireless International Inc. 350 West Java Dr. Sunnyvale, CA 94089 United States	HW & SW DE, SER
Ruckus Wireless Network Technology (Shenzhen) Co. Ltd. Units C&D, 5th Floor, No. 2 Finance base, 8 KeFa Road, Shenzhen, China	SW DE, SC, HW DE

Certificate Expires: January 04, 2026  
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# CERTIFICATE ADDENDUM

Certificate Number: 111045.000  
ADDENDUM Page Three of Seven

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**ISO 9001:2015**

Site Address	Site Activities
<b>Site Address</b>	<b>Site Activities</b>
CommScope Asia (Suzhou) Technologies Co., Ltd. 77 Qiming Road, Suzhou Industrial Park Suzhou, Jiangsu 215121 Peoples Republic of China	MFG, SC
Ruckus Wireless International Inc., Taiwan Branch @ Neihs District, Taipei City, Rui Road 411, 10th floor, Taipei	SW DE
ARRIS Group India Pvt Limited (AGIPL) Salarpuria Supreme, Ground Floor West Wing & First Floor Munnekolalu Village, Varthur Hobli, Outer Ring Road, Bangalore-560037	SW DE
ARRIS Group de Mexico S.A. de C.V. Av. La Paz 11721 Parque Industrial Pacifico Tijuana, BC 22643 Mexico	MFG, REP, SC
ARRIS Communications Ireland Limited Building 4300, Cork Airport Business Park Kinsale Road Cork County Ireland	HW & SW DE
ARRIS Group India Private Limited "The Senate" No:33/1, Ulsoor Road, Bangalore - 560 042 India	HW & SW DE

Certificate Expires: January 04, 2026  
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# CERTIFICATE ADDENDUM

Certificate Number: 111045.000  
ADDENDUM Page Four of Seven

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**ISO 9001:2015**

Site Address	Site Activities
ARRIS Group, Inc. 50 Stranmillis Embankment Belfast, BT95FL Northern Ireland	SW DE
CommScope Czech Republic, s.r.o. Turanka 856/98B 627 00 Brno Czech Republic	HW DE,
CommScope CZ, spol. s.r.o. U Morusi 888, 53006 Pardubice Czech Republic Czech Republic	HW DE,
CommScope Connectivity UK Limited Units 1 and 4 Kinmel Park Industrial Estate Bodelwyddan, Denbighshire, LL18 5TZ United Kingdom	HW DE, MFG, SAL
CommScope Design & Integration UK Ltd. Unit 5 & 6 Eden Business Park Eden House Drive Old Malton, Malton, North Yorkshire YO17 6AE United Kingdom	HW DE, MFG, SC

Certificate Expires: January 04, 2026  
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Certificate Number: 111045.000  
ADDENDUM Page Five of Seven

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**ISO 9001:2015**

Site Address	Site Activities
CommScope Design & Integration UK Limited 412 The Quadrant, Birchwood Park Warrington, WA3 6FW United Kingdom	SER
CommScope EMEA Ltd. Corke Abbey Avenue Bray, Co. Dublin Ireland	MFG, SAL
CommScope EMEA Ltd. Diestsesteenweg 692 3010 Kessel-Lo, Belgium	HW DE, MFG, SAL
CommScope Italy Srl Via Archimede, 22/24 Agrate Brianza (MB) 20864 Italy	HW DE, REP, SW DE
Telecom Networks Americas AV. HIPOLITO YRIGROYEN 2999, DEPOSITO 6 EL TALAR, TIGRE Buenos Aires B1618AXD Argentine Republic	SAL, DIST
CommScope Networks India Private Limited Salarpuria Softzone, A Block, 1st Floor Survey No 80/1, 81/1, 81/2, B Wing, Belandur Village, Varthur Hobli, Outer Ring Bangalore – Karnataka 560103 India	SW DE
ADC India Communications Ltd. No 10 C , 2nd Phase Peenya Industrial Area Bangalore – Karnataka 560058 India	MFG, SC

Certificate Expires: January 04, 2026  
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# CERTIFICATE ADDENDUM

Certificate Number: 111045.000  
ADDENDUM Page Six of Seven

The Quality Management System and implementation of:

**CommScope, Inc.**

With site at:

**CommScope Asia (Suzhou) Technologies Co.,Ltd.**

77 Qiming Road, Suzhou Industrial Park

Suzhou, Jiangsu 215121

Peoples Republic of China

meets the requirements of the standard:

## ISO 9001:2015

The validity of this certificate depends on the validity of the main certificate.

### Scope:

Production of network cable, fiber cable and communication equipment component (copper patch cords, copper panel, accessories etc.)

**Certification Structure:** Multi-site

Certificate Expires:	January 04, 2026
Certificate Issued:	January 05, 2023
Certified Since:	January 10, 2001



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# 证书附录

证书编号: 111045.000

附录第7页,共7页

质量管理体系和实施:

**CommScope, Inc.**

其场所:

**康普科技 (苏州) 有限公司**

中国江苏省苏州工业园区启明路77号,邮编215121

符合以下标准要求:

## ISO 9001:2015

本证书的有效性取决于主证书的有效性。

### 范围:

网络线、光缆、通信系统设备材料 (网络跳线、配线装置等) 的生产。

认证结构: 多场所

证书有效期: 2026.01.04

发证日期: 2023.01.05

首次发证日期: 2001.1.10



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# Certificate of Registration

## ENVIRONMENTAL MANAGEMENT SYSTEM - ISO 14001:2015

This is to certify that:

CommScope, Inc. of North Carolina  
1100 CommScope Place SE  
Hickory  
North Carolina  
28603-0339  
USA


Holds Certificate No:

**EMS 648387**

and operates an Environmental Management System which complies with the requirements of ISO 14001:2015 for the following scope:

The environmental management system to control the risks associated with the manufacture, distribution, field support and central function of telecommunication products and services.

For and on behalf of BSI:

  
Carlos Pitanga, Chief Operating Officer Assurance – Americas

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 1 of 5



...making excellence a habit.™



Certificate No: **EMS 648387**

Location	Registered Activities
Andrew Telecommunications de Reynosa S. de R.L. de C.V. Av. Industrial Reynosa Lte 2 al 5 Parque Industrial Center Reynosa Tamaulipas 88780 Mexico	Manufacture and distribution of telecommunication products including antenna and cable.
CommScope Asia (Suzhou) Technologies Co., Ltd. EPZ II, 77 Qiming Road Suzhou Industrial Park Suzhou Jiangsu 215121 China	Manufacture and distribution of telecommunication products, including cable.
Andrew Telecommunications India Pvt. Ltd. Plot No. N-2, Phase IV Verna Industrial Estate Verna Salcette Goa 403 722 India	Manufacture and distribution of telecommunication products, including antenna and cable.
CommScope EMEA Ltd. Corke Abbey Avenue Bray County Dublin A98FY03 Ireland	Manufacture and distribution of telecommunication products, including cable and connectors.
CommScope Telecommunications (China) Co., Ltd. 68 West Su Hong Xi Lu Suzhou Industrial Park Suzhou Jiangsu 215021 China	Manufacture and distribution of telecommunication products, including antenna and cables.

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 2 of 5

This certificate remains the property of BSI and shall be returned immediately upon request.

An electronic certificate can be authenticated [online](http://www.bsigroup.com/ClientDirectory). Printed copies can be validated at [www.bsigroup.com/ClientDirectory](http://www.bsigroup.com/ClientDirectory). To be read in conjunction with the scope above or the attached appendix.

Information and Contact: BSI, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP. Tel: + 44 345 080 9000  
BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.  
A Member of the BSI Group of Companies.



Certificate No: **EMS 648387**

Location	Registered Activities
Andrew Wireless Systems GmbH Industriering 10 Buchdorf 86675 Germany	Manufacture and distribution of telecommunication products, including amplifiers and antenna systems.
CommScope, Inc. of North Carolina 1100 CommScope Place SE Hickory North Carolina 28603-0339 USA	Corporate headquarters responsible for management system oversight of all locations listed on this certificate.
CommScope Inc. 6519 CommScope Road Catawba North Carolina 28609-0199 USA	Manufacture and distribution of telecommunication products, including cable.
CommScope Inc. 3642 US Hwy 70 East Claremont North Carolina 28610-0879 USA	Manufacture and distribution of telecommunication products, including cable.
CommScope Czech Republic s.r.o. Turanka 98B Brno 62700 Czech Republic	Manufacture and distribution of telecommunication products, including connectors and terminations.
CommScope Inc. of North Carolina 1100 CommScope Place SE Hickory North Carolina 28603-0339 USA	Customer care, facility maintenance, and administrative functions.
ADC de Delicias, S. de R.L. de C.V. Blvd. Fernando Baeza No. 1301 Sur Delicias Chihuahua 33000 Mexico	Manufacturing and distribution of telecommunication products.

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 3 of 5

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Certificate No: **EMS 648387**

Location	Registered Activities
ADC de Juarez S. de R.L. de C.V. Parque Industrial Antonio J Bermudez Ciudad Juarez Chihuahua 32470 Mexico	Manufacturing and distribution of telecommunication products.
CommScope Connectivity Belgium bvba Diestsesteenweg 692 Kessel-lo 3010 Belgium	Manufacture and distribution of telecommunication products.
CommScope Technologies de Juarez S. de R.L. de C.V. Santiago Troncoso 331 Praderas del Sur, Ciudad Juarez Chihuahua 32575 Mexico	Manufacture of Fiber Optic Splice Closures (FOSC), Fiber Guide Systems (FGS), Hardened Connectivity and Molding-Gel Filling, including: plastic injection molding, plastic extrusion, plastic and metal machining, and assembly operations.
CommScope Connectivity UK Limited Unit 1 Kinmel Park Bodelwyddan Rhyl, Denbighshire LL18 5TZ United Kingdom	Fibre optic cable manufacturing, termination and design of other telecommunication products and services.
CommScope 11312 S. Pipeline Road Eules Texas 76040 USA	Manufacture, distribution, field support and central function of telecommunication products.
ARRIS GROUP DE MEXICO SA DE CV Av. De la Paz, #11721 Parque Industrial Pacifico Tijuana Baja California 22643 Mexico	Manufacture, repair, support, repair service, distribution of products and components for telecommunications that provide integrated solutions for voice, video and data through the processes of SMT, manual and mechanical assembly, soldering (manual, selective, printed, wave) electrical testing and packaging.

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 4 of 5

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A Member of the BSI Group of Companies.



Certificate No: **EMS 648387**

Location	Registered Activities
CommScope Design & Integration UK Ltd Unit 5 & 6, Eden Business Park Edenhouse Drive Old Malton Malton YO17 6AE United Kingdom	Manufacture and distribution of telecommunications products including cabinets.
Arris Indústria Eletrônica do Brasil Ltda. CNPJ: 09.154.836/0001-15 Avenida Torquato Tapajós, 9475 Tarumã Manaus Amazonas 69041-025 Brasil	Manufacturer and distribution of Receivers, Television signal Decoders and Modulator/Router.
CommScope Design and Integration UK Ltd. Lovell House, 412 The Quadrant Birchwood Park Warrington WA3 6FW United Kingdom	Telecommunications project management, site surveys, installations commissioning and rigging.

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

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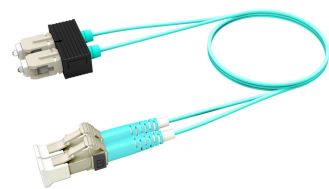
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# FFXLCSC42

## Base Product



OM4 LC/UPC to SC/UPC, Fiber Patch Cord, 1.6 mm Duplex, Low Smoke Zero Halogen (LSZH)

## Product Classification

Regional Availability	Asia   Australia/New Zealand   Europe   Latin America   Middle East /Africa   North America
Portfolio	CommScope®
Product Type	Fiber patch cord, duplex
Product Brand	SYSTIMAX InstaPATCH® 360
Product Series	FFX
Ordering Note	For lengths greater than 999 ft (304 m), orders must be in meters   Minimum length may vary based on cable configuration

## General Specifications

Color, boot A	Aqua
Color, connector A	Beige
Color, boot B	Aqua
Color, connector B	Beige
Interface, Connector A	LC/UPC
Interface, Connector B	SC/UPC
Jacket Color	Aqua
Polarity	Method B
Total Fibers, quantity	2

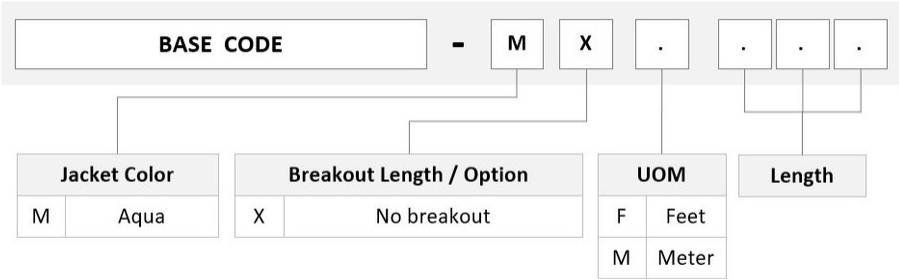
## Dimensions

Cable Assembly Length Range (m)	1 – 999
Cable Assembly Length Range (ft)	1 – 999
Diameter Over Jacket	1.6 mm   0.063 in



# FFXLCSC42

## Ordering Tree



## Mechanical Specifications

**Cable Retention Strength, maximum** 11.24 lb @ 0 ° | 4.40 lb @ 90 °

## Optical Specifications

**Fiber Mode** Multimode  
**Fiber Type** OM4, LazrSPEED®

## Environmental Specifications

**Operating Temperature** -10 °C to +60 °C (+14 °F to +140 °F)  
**Operating Temperature, pending approval** -20 °C to +70 °C (-4 °F to +158 °F)  
**Environmental Space** Dual Rated LSZH/Riser

## Regulatory Compliance/Certifications

Agency	Classification
ANATEL	Compliant
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a>
ROHS	Compliant
UK-ROHS	Compliant



## Included Products

# FFXLCSC42

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460125198	–	Pre-Radiused LC Connector duplex for 1.6 mm Fiber, multimode
460125750	–	LazrSPEED® Pre-Radiused SC Connector for 1.6 mm Fiber Cordage, Duplex, multimode
760021659	–	Fiber Indoor Cable, LazrSPEED® 1.6 mm Low Smoke Zero Halogen Riser, 2-fiber Zipcord, Multimode OM4, Feet jacket marking, Aqua jacket color, Eca Flame Rating
N-002-ZC-5K-F16AQ/E		



Pre-Radiused LC Connector duplex for 1.6 mm Fiber, multimode

Product Classification

Regional Availability	Asia   Australia/New Zealand   EMEA   Latin America   North America
Portfolio	CommScope®
Product Type	Fiber connector

General Specifications

Body Style	Duplex
Color	Beige
Ferrule Geometry	Pre-radiused
Interface	LC/UPC

Dimensions

Length	50.3 mm   1.98 in
Compatible Cable Diameter	1.6 mm   0.063 in

Material Specifications

Ferrule Material	Zirconia
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Mechanical Specifications

Cable Retention Strength, maximum	11.24 lb @ 0 °
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Optical Specifications

Fiber Mode	Multimode
Insertion Loss Change, mating	0.3 dB
Optical Components Standard	ANSI/TIA-568-C.3
Insertion Loss Change, temperature	0.3 dB
Insertion Loss, maximum	0.3 dB
Insertion Loss, ULL, maximum	0.15 dB
Return Loss, minimum	27 dB

Packaging and Weights

Packaging quantity 2

Regulatory Compliance/Certifications

Agency	Classification
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system

\* Footnotes

Insertion Loss Change, mating	TIA-568: Maximum insertion loss change after 500 matings
Insertion Loss Change, temperature	Maximum insertion loss change from -10 °C to +60 °C (+14 °F to +140 °F)



LazrSPEED® Pre-Radiused SC Connector for 1.6 mm Fiber Cordage, Duplex, multimode

Product Classification

Regional Availability	Asia   Australia/New Zealand   EMEA   Latin America   North America
Portfolio	CommScope®
Product Type	Fiber connector
Product Brand	LazrSPEED®

General Specifications

Body Style	Duplex
Color	Beige
Ferrule Geometry	Pre-radiused
Interface	SC/UPC

Dimensions

Length	56 mm   2.205 in
Compatible Cable Diameter	1.6 mm   0.063 in

Material Specifications

Ferrule Material	Zirconia
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Mechanical Specifications

Cable Retention Strength, maximum	11.24 lb @ 0 °
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Optical Specifications

Fiber Mode	Multimode
Insertion Loss Change, mating	0.3 dB
Optical Components Standard	ANSI/TIA-568-C.3
Insertion Loss Change, temperature	0.3 dB
Insertion Loss, typical	0.3 dB
Insertion Loss, ULL, maximum	0.15 dB
Return Loss, minimum	25 dB

Packaging and Weights

**Packaging quantity** 2

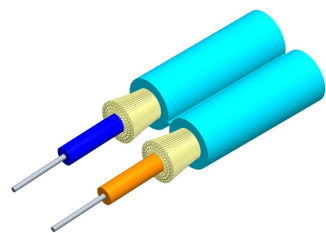
Regulatory Compliance/Certifications

Agency	Classification
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system

\* Footnotes

<b>Insertion Loss Change, mating</b>	TIA-568: Maximum insertion loss change after 500 matings
<b>Insertion Loss Change, temperature</b>	Maximum insertion loss change from -10 °C to +60 °C (+14 °F to +140 °F)





Fiber Indoor Cable, LazrSPEED® 1.6 mm Low Smoke Zero Halogen Riser, 2-fiber Zipcord, Multimode OM4, Feet jacket marking, Aqua jacket color, Eca Flame Rating

Product Classification

Regional Availability	Asia   Australia/New Zealand   EMEA   Latin America   North America
Portfolio	CommScope®
Product Type	Fiber indoor cable
Product Series	N-ZC

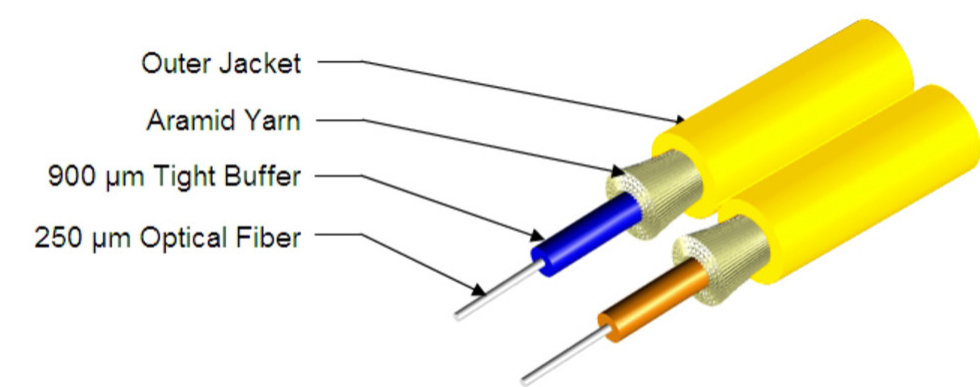
General Specifications

Cable Type	Cordage
Construction Type	Non-armored
Subunit Type	Gel-free
Jacket Color	Aqua
Jacket Marking	Feet
Total Fiber Count	2

Dimensions

Height Over Jacket	1.7 mm   0.067 in
Width Over Jacket	3.5 mm   0.138 in

Representative Image



## Mechanical Specifications

Minimum Bend Radius, loaded	38 mm   1.496 in
Minimum Bend Radius, unloaded	15 mm   0.591 in
Tensile Load, long term, maximum	53 N   11.915 lbf
Tensile Load, short term, maximum	178 N   40.016 lbf
Compression	10 N/mm   57.101 lb/in
Compression Test Method	FOTP-41   IEC 60794-1 E3
Flex	300 cycles
Flex Test Method	FOTP-104   IEC 60794-1 E6
Impact	0.74 N-m   6.55 in lb
Impact Test Method	FOTP-25   IEC 60794-1 E4
Strain	See long and short term tensile loads
Strain Test Method	FOTP-33   IEC 60794-1 E1
Twist	10 cycles
Twist Test Method	FOTP-85   IEC 60794-1 E7
Vertical Rise, maximum	500 m   1,640.42 ft

## Optical Specifications

Fiber Type	OM4, LazrSPEED® 550   OM4, LazrSPEED® 550
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## Environmental Specifications

Installation temperature	-20 °C to +60 °C (-4 °F to +140 °F)
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Operating Temperature	-20 °C to +70 °C (-4 °F to +158 °F)
Storage Temperature	-40 °C to +70 °C (-40 °F to +158 °F)
Cable Qualification Standards	ANSI/ICEA S-83-596   Telcordia GR-409
EN50575 CPR Cable EuroClass Fire Performance	Eca
Environmental Space	Low Smoke Zero Halogen (LSZH)   Riser
Flame Test Listing	NEC OFNR-ST1 (ETL) and c(ETL)
Flame Test Method	IEC 60332-1-2   IEC 60332-3   IEC 60754-2   IEC 61034-2   UL 1666   UL 1685

## Environmental Test Specifications

Heat Age	-20 °C to +85 °C (-4 °F to +185 °F)
Heat Age Test Method	IEC 60794-1 F9
Low High Bend	-20 °C to +70 °C (-4 °F to +158 °F)
Low High Bend Test Method	FOTP-37   IEC 60794-1 E11
Temperature Cycle	-20 °C to +70 °C (-4 °F to +158 °F)
Temperature Cycle Test Method	FOTP-3   IEC 60794-1 F1

## Packaging and Weights

Cable weight	6 kg/km   4.032 lb/kft
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## Regulatory Compliance/Certifications

Agency	Classification
CENELEC	EN 50575 compliant, Declaration of Performance (DoP) available
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a>
ROHS	Compliant
UK-ROHS	Compliant



### \* Footnotes

Operating Temperature	Specification applicable to non-terminated bulk fiber cable
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## LIMITED WARRANTY



1. **Definitions.** For purposes of this Warranty, (i) "Buyer" shall mean the individual or entity identified on the applicable purchase order or supply agreement (or, if different, on Seller's quotation, order acknowledgement or statement of work ), (ii) "Seller" shall mean the CommScope entity identified on such entity's quotation, order acknowledgement, statement of work or supply agreement, (iii) "Hardware" means equipment designed and manufactured by or on behalf of Seller, or any third-party manufacturer's equipment offered for sale by Seller to Buyer, (iv) "Product" shall mean a product manufactured by or on behalf of Seller pursuant to the applicable supply agreement, quotation or order acknowledgement, and includes any combination of Hardware and Software, (v) "Services" means site engineering, system integration, product installation, implementation, training, maintenance and technical support services for Products, or other professional services provided by Seller to Buyer. Services exclude managed services and hosted cloud services provided by Seller, (vi) "Software" means Seller-licensed software, either embedded or standalone, including any updates provided, and any other enhancements, modifications, and bug fixes provided thereto, in object code form only (unless otherwise specified), and any full or partial copies thereof. Software does not include software created or owned by third parties, including but not limited to MediaKind Software, Google's Android Software or any third party application software, and (vii) "Warranty Period" means, unless a different time period is set forth in **Exhibit A**, (a) for Hardware, one year from date of original shipment from Seller's facility, (b) for Software-only Products, ninety (90) days from the date such Software is first made available to Buyer, or for Software embedded in a Hardware Product, ninety (90) days from date of original shipment of the Product from Seller's facility, and (c) for Services, thirty (30) days from the date the performance of such Services has been rendered.

2. **Limited Warranty.** Seller warrants that, as of the date of delivery, Seller has good title to the Product, free from any lawful security interest or other lien or encumbrance unknown to Buyer. In addition, during the Warranty Period, the Product and Services will be free from defects in materials or workmanship arising under proper and normal use. This Warranty shall apply only to the Products and Services and shall not apply to any other goods or materials, parts or components of a system or any system as a whole. This Warranty does not cover ordinary wear and tear. Seller does not warrant (i) Products not purchased from Seller or its authorized resellers; (ii) that the operation of the Product will be uninterrupted or error-free; (iii) that the Product will operate in combination with other third-party products selected by Buyer; or (iv) any products manufactured by third parties; provided that Seller will, to the extent permitted by the manufacturer, assign third-party warranties to Buyer. Seller gives no warranty for, and shall have no liability with respect to, any defects arising from any software (other than the Software), including, but not limited to MediaKind Software, Android Software or any third-party application software, downloaded to or otherwise used in conjunction with the Product. Seller further warrants to Buyer that during the Warranty Period, all Services performed by Seller for Buyer will be provided in a workmanlike manner.

3. **Disclaimers.** EXCEPT AS EXPRESSLY SET FORTH IN THIS LIMITED WARRANTY OR IN A SEPARATE, APPLICABLE SOFTWARE LICENSE AGREEMENT, ALL SOFTWARE IS LICENSED ON AN "AS IS" BASIS WITHOUT WARRANTY.

4. **Inspection and Return Authorization.** Buyer must promptly notify Seller of any claimed defect in the Product and/or Services. If Buyer claims that a Product is defective in materials or workmanship, Seller shall have the right to either examine the Product where it is located or, in its sole discretion, issue shipping instructions for return of the Product. Seller's inspection in response to a warranty claim shall not constitute acceptance or acknowledgment of the claim's validity. Except as otherwise agreed to in writing, Products may not be returned to Seller without prior authorization. Buyer must contact Seller to obtain an authorization number and return the Products to the location designated by Seller. Any Products returned to Seller without proper authorization will be returned to Buyer at Buyer's expense. Risk of loss, damage and insurance responsibilities for the Products shall not pass from Buyer to Seller until delivery of the Products to Seller's designated location. Buyer shall prepay all transportation charges for such return.

5. **Remedies.** Seller's sole and exclusive obligation and Buyer's exclusive remedy under this Warranty is Seller's repair or replacement of the defective Product or re-performance of Services or issuance of a credit for the net book value of the purchase price of the defective Product. Seller shall have sole discretion as to which of these remedies Seller will provide. Seller is not liable for any repair or maintenance costs incurred by Buyer, unless Seller authorizes such charges in writing in advance of the commencement of the work. If Seller elects to replace or repair the defective Product, the replaced or repaired Product will be warranted for the remainder of the Warranty Period applicable to the originally shipped Product, but the Warranty shall not be extended beyond the original Warranty Period. Replacement Products may be new, refurbished or contain refurbished materials.

6. **Notice and Waiver.** If Buyer discovers any defect in the Product, Buyer must provide prompt (and in no case later than thirty (30) days after discovery) written notice to Seller of the claimed defect. Such notice shall describe, in reasonable detail, the symptoms of such defect. The notice must be received by Seller during the Warranty Period for such Product. Failure to give timely notice of a claim shall result in Buyer's waiver of such claim.

7. **Transfer of Ownership.** This Warranty is not transferable unless Buyer is expressly authorized by Seller in writing to resell the Product. In addition, Buyer must notify Seller on or before the fifteenth (15<sup>th</sup>) day after the date on which it transfers ownership of the warranted Product. Any transfers in violation of this Section shall invalidate this Warranty. Notice of the transfer of ownership must be in writing and shall include the name and address of the new owner.

8. **Exclusions from Warranty.** This Warranty shall not apply to problems attributable to, or as a result of:

- (a) improper installation or misapplication of parts;
- (b) chain or system failures induced by other products or components;
- (c) lack of proper inspection or maintenance or failure to provide a suitable operating environment;
- (d) any consumables provided with the Product, including but not limited to batteries and other accessories, and any other materials, components or products manufactured by a third party;
- (e) power surges, fire, unusual mechanical, physical or electrical stress, severe weather conditions or acts of nature, including but not limited to, lightning or floods;
- (f) usage or operation not in accordance with published ratings, specifications or instructions, including but not limited to environmental specifications identified by Seller;
- (g) any adjustment, modification, alteration, removal or repair of any part of the Product, including but not limited to removal or alteration of serial numbers or other identifying marks not expressly authorized by Seller in writing;
- (h) accidental damage, misuse, abuse, neglect or unauthorized access of the Product or of any system of which the warranted Product is a part;
- (i) any type of aesthetic changes due to oxidation or corrosion occurring on stainless steel or galvanized steel parts installed in unusually corrosive marine and industrial atmospheres (in which case Seller's only obligation shall be to ensure that Product complies with Seller's published material specifications);
- (j) use of the Product for purposes other than that for which it was designed; or
- (k) mishandling during shipment of the Product.

## LIMITED WARRANTY

This Warranty is for Products installed and used in accordance with Seller's design, installation and operating parameters. Buyer's failure to ensure conformity with such parameters will void all warranties. Under no circumstance shall Seller have any liability or obligation with respect to expenses, liabilities or losses associated with the installation or removal of any Product or the installation or removal of any components for inspection, testing or redesign occasioned by any defect or by any repair or replacement of a Product.

9. **Limitation on Liability.** THE WARRANTIES SET FORTH IN SECTION 2 HEREOF ARE EXCLUSIVE AND ARE MADE ONLY TO BUYER. SELLER MAKES NO OTHER REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, AND SPECIFICALLY DISCLAIMS AND EXCLUDES ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY, NONINFRINGEMENT OR FITNESS FOR A PARTICULAR PURPOSE AND ANY REPRESENTATION OR WARRANTY ARISING BY USAGE OF TRADE, COURSE OF DEALING OR COURSE OR PERFORMANCE. No person is authorized to give any additional warranties on Seller's behalf or to assume for Seller any other liability, except in a writing signed by an authorized officer of Seller. SELLER'S TOTAL LIABILITY FOR ANY CLAIM OR DAMAGE ARISING OUT OF AND/OR IN CONNECTION WITH THE MANUFACTURE, SALE, DELIVERY OR USE OF THE PRODUCTS OR SERVICES WILL BE LIMITED TO PROVEN DIRECT DAMAGES, NOT TO EXCEED (I) FOR PRODUCTS, THE DEPRECIATED VALUE OF THE PURCHASE PRICE OF SUCH PRODUCTS OR (II) FOR SERVICES, THE ACTUAL AMOUNT PAID TO SELLER FOR SERVICES DURING THE 12 MONTH PERIOD IMMEDIATELY PRIOR TO THE EVENT (OR SERIES OF EVENTS) GIVING RISE TO THE LIABILITY. IN NO EVENT WILL SELLER BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL OR PUNITIVE DAMAGES, INCLUDING, WITHOUT LIMITATION, ANY CLAIM FOR LOSS OF ACTUAL OR ANTICIPATED DATA, USE, REVENUES OR PROFITS. The Products are not specifically designed, tested, manufactured or intended for operation or use in any inherently dangerous, life endangering or life support applications where any failure of the Products could lead to death, personal injury or significant physical or environmental damage (High Risk Activities). If Buyer uses the Products in High Risk Activities, including but not limited to nuclear facilities or the flight, navigation or communication of aircraft, Buyer agrees that neither Seller nor its third party licensors are liable in whole or in part, for any claims or damages arising from such use, and that Buyer shall indemnify and hold Seller and its third party licensors harmless from any and all claims for loss, cost, damage, expense or liability arising out of or in connection with any use of the Products in High Risk Activities. These limitations on liability will apply regardless of the form of action, whether in contract, tort, strict liability or otherwise, and whether damages were foreseeable and will survive failure of any exclusive remedies provided in Section 4 hereof.

10. **Choice of Law.** The terms and conditions contained herein and the rights of the parties to any transaction to which they relate shall be governed by and construed in accordance with the laws of the State of North Carolina, U.S.A. The United Nations Convention on Contracts for the International Sale of Goods shall not apply.



## LIMITED WARRANTY

### Exhibit A

Product Categories	Warranty Period from Original Shipment Date*
<b>Category A Products</b> E6000® Converged Edge Router (CER); E6000n™ Remote PHY Devices (RPDs); E6000r™ Remote PHY Shelves; E6000n™ Remote MACPHY Devices (RMDs); vManager; Remote OLT (R-OLT); associated power supplies and accessories. FLX PON OLT portfolio including vOLT. CherryPicker products, Encoder products including ME-7000, SE-6000; DSR-4xxx, DSR-6xxx and DSR-7xxx series IRD products, and Uplink systems including TME-2020, VDP-1000, BNC, DEM, and SEM; All APEX Universal EQAM including APEX1000 and APEX3000; All Aloha interactive products including OM2000, ARPD, ADM4000 and NC1500 4.0. All SDM products. All VUE and VTM Software Products. All STDC products.	Hardware One (1) Year Software Ninety (90) Days
<b>Category B Products</b> All High and Standard Definition Transport Adapter MS4000™ Media Streamer	Hardware One (1) Year Software Ninety (90) days ** For certain CPE, option for 1% overship in lieu of Hardware warranty is standard
<b>Category C Products</b> Intentionally left blank.	
<b>Category D Products</b> All Third Party OEM Products: power meters; All VUE and VTM hardware platforms; NC1500 4.0 hardware platform; LQA256 Legacy QAM Adapter; Elemental Products including Live, Server, Delta, Conductor and StatMux; DC2180 Cabinet Node, Cooling Systems	Pass Through from OEM: Hardware One (1) Year Software Ninety (90) Days
<b>Category E Products</b> Intentionally left blank	
<b>Category F Products</b> All OM and SG optical node platforms, Flex Max® and Starline® amplifier platforms, RF Taps & Passives, and Optical Passives	Hardware Five (5) Years within the United States and Canada Hardware Three (3) Years outside United States and Canada Software Ninety (90) Days
<b>Category F1 Products</b> All CHP Headend Optical (HEO) Elements	Hardware Three (3) Years Software Ninety (90) Days
<b>Category G1 Products</b> All NC optical node platforms and Optical Passives, including OP/NP/DP/DC models.	Hardware Five (5) Years Software Ninety (90) Days
<b>Category G2 Products</b> All CH3 Headend (HEO) Elements	One (1) year
<b>Category G3 Products</b> All EPON and GPON ONUs, RFoG/HPON R-ONUs, including, CP8 models and associated power supplies and accessories	Hardware Three (3) Years Software Ninety (90) Days

## LIMITED WARRANTY

<b>Category H Products</b> All ConvergeMedia™ Distribution Platforms and Management Suite, AdManager™ including SkyVision Ad Management and EMP solutions CVEx™, SVA, all Vertasent products including SVOM, SVM and ERM, AdEdge™ COM and AdEdge APS,VMS, Manifest Delivery Controller (MDC), ARRIS Video Content Manager (AVCM) and Next Generation Insertion (NGI) and Multicast ABR.	Hardware One (1) Year Software Ninety (90) Days
<b>Category I Products</b> ServAssure® Advanced, ServAssure® NXT - Alarm Central, ServAssure® NXT - Analyze, ServAssure Domain Manager and EventAssure™. WorkAssure™® Workforce Management, Mobile TV, SecureMedia and Titanium	Hardware One (1) Year Software Ninety (90) Days
<b>Category J Products</b> Intentionally left blank	
<b>Category K Products</b> Intentionally left blank.	
<b>Category L Products</b> Intentionally left blank	
<b>Category M Products</b> Intentionally left blank.	
<b>Category N Products</b> Intentionally left blank.	
<b>Category O Products</b> All CAS Products including DAC, CASMR (and associated plug-ins), CAST, Advisor, CSS, OLL, CSS-Lite, KLS, DKS, CPMS	DAC, CASMR, CAST, Advisor, CSS Hardware Three (3) Years OLL, CSS-Lite, KLS, DKS, OLES, CPMS Hardware One (1) Year Software Ninety (90) Days
<b>Category P Products</b> Intentionally left blank.	
<b>Category P1 Products</b> Intentionally left blank	
<b>Category Q Products</b> Intentionally left blank	
<b>Category R Products</b> Intentionally left blank	
<b>Category R1 Products</b> Intentionally left blank	
<b>Category S Products</b> Intentionally left blank	
<b>Category S1 Products</b> Intentionally left blank	

## LIMITED WARRANTY

<p><b>Category T Products</b> RUCKUS Wi-Fi</p>	<p>Hardware:</p> <ul style="list-style-type: none"> <li>- Indoor Access Points and Wall Plate Access Points – Limited Lifetime Warranty,** except for access points with an “e” suffix (e.g., R350e), for which the HW warranty period is one (1) year.</li> <li>- Outdoor Access Points – One (1) Year</li> <li>- Controllers – One (1) Year, except ZoneDirector controllers are covered by the Limited Lifetime Warranty**</li> </ul> <p>Software Ninety (90) Days</p>
<p><b>Category T1 Products</b> RUCKUS ICX Switches</p>	<ul style="list-style-type: none"> <li>- ICX Switches (including switch modules, PSUs, and Fans, but excluding removable optics/transceivers and LEDs) – Limited Lifetime Warranty,** except for ICX 7150- C08PT, for which the HW warranty period is 13 months.</li> <li>- LEDs – 12 months</li> <li>- Removable Optics/Transceivers – 60 months (13 months if shipped from Seller prior to June 1, 2021)</li> </ul> <p>Software: Limited lifetime access to defect repairs, and software maintenance updates through end of support date of product</p>
<p><b>Category T2 Products</b> Intentionally left blank</p>	
<p><b>Category U Products</b></p> <p>Other OSP Cable Products (P3®, Drop Coax, Fiber Cable, Fiber Drop Cable, CIC)</p> <p>NovuX Products</p> <p>Prodigy</p> <p>Products FDH</p> <p>Products</p> <p>Multiservice terminals (MST), Open Terminals (OTE) and Hardened Drop Cable</p> <p>Assemblies OSP “Box” Products</p> <p>Mini-RDTs and RDTs</p> <p>FOSC™, FIST™ and</p> <p>Tenio™</p> <p>OSP Copper Connect and Closure Products</p> <p>HELIAX® FiberFeed® Products, including FiberFeed® hybrid and fiber cables and assemblies, power cables and junction boxes</p> <p>Fiber Optic Panels, including Accessories, Mounting Hardware, Modules</p> <p>Fiber Optic Field Terminated Connectors, Kits, Tools, Consumables,</p> <p>Accessories Indoor Fiber Cable, Patch Cords, Cable Assemblies, Fiber Trunks</p> <p>Passive Optical Components and Value Added Modules (VAMs)</p> <p>FiberGuide® : Fiber cable Management System</p> <p>Optical Distribution Frames, including Modules, Blocks, Accessories and</p> <p>Hardware Cabinets Cable and Apparatus Products</p> <p>Alifabs™ Cabinets &amp; Ancillary Products</p> <p>Alifabs™ Telecommunications Towers and Accessories</p> <p>Metro Cell Products, including Enclosures; Integrated Pole; Standard Poles; Accessories; and Wood Pole Brackets</p>	<p>One (1) year</p>



## LIMITED WARRANTY

<b>Category V Products</b> ValuDAS® Passive Products, including Air Directional Couplers, Hybrid Couplers, High Power Splitters, and Cell-Max™ Antennas Standard Tower Mounted Amplifier, Bias Tee and Power Distribution Unit Products Standard Filter & Combiner Products  Electronic Enclosure Products (Cabinets)  Alifabs™ Free Cooling Products and Accessories and Spare Parts, including  Monitor All-In-One FLX (Active Passive Cabines)  PowerShift™ & Power Products	Two (2) years
<b>Category W Products</b> ValuSite® Products  I-Line Accessory Products  Microwave Antennas  Terrestrial Microwave System Products (including Microwave System Flex-Twist, Coupler, Filter and Diplexer Products)	Three (3) years
<b>Category X Products</b> Broadband RF Connectivity Products   Premium Passive Products, including In-Building Directional Couplers, Hybrid Matrices, Tappers, Power Splitters, Terminations, Attenuators and CMAX Antenna Products	Five (5) years
<b>Category Y Products</b> QR® Coaxial Cable	Five (5) years
<b>Category Z Products</b> Standard RADIAX® Cable, Connector, Accessory and Cable Assembly* Products  * RADIAX® Cable Assembly Product means any RADIAX® coaxial cable that has been fitted with Seller's connectors in accordance with the installation instructions.	One (1) year
<b>Category AA Products</b> Standard CNT® Cable, Connector, Accessory and Cable Assembly* Products  * CNT® Cable Assembly Product means any CNT® coaxial cable that has been fitted with Seller's connectors by Seller or its certified distributor	Five (5) years; except that the Warranty Period for Products purchased for resale purposes shall be one (1) year.
<b>Category BB Products</b> Standard HELIAX® Cable, Connector, Accessory and Cable Assembly* Products  * HELIAX® Cable Assembly Product means any HELIAX® coaxial cable or elliptical waveguide that has been fitted with Seller's connectors by Seller or its certified distributor.	Ten (10) years; except for the following: (i) three (3) years for weatherproofing kits (including SureGuard boots); (ii) one (1) year for cable preparation tools (excluding blades); (iii) one year for single click-on hanger kits; and (iv) two (2) years for surge arrestors.
<b>Category CC Products</b> Standard ERA/ION-E®, ION-M®, ION-U®, MR, CMR, i-POI®, e-POI™, and Node Repeater Products	Hardware, the earlier of: (i) one (1) year from the date of installation; or (ii) fifteen (15) months from the date of shipment. Software Ninety (90) Days
<b>Category DD Products</b> In- Building and Fixed Subscriber Antennas	The earlier of: (i) three (3) years from the date of installation or (ii) thirty-nine (39) months from the date of original shipment

## LIMITED WARRANTY

<b>Category EE Products</b> OneCell®  Powered Fiber Cable Solution: Hybrid Copper and Fiber Cables, Class 2 Power Supplies, Indoor/Outdoor POE Extenders, Field Terminated Outlets, Consolidation Boxes and Related Passive Components	Hardware, the earlier of: (i) one (1) year from the date of installation; or (ii) fifteen (15) months from the date of original shipment Software Ninety (90) Days
<b>Category FF Products</b> Small Cell Device Management System (DMS) Software DAS Device Management System (AIMOS) Software	Ninety (90) days
<b>Category GG Products</b> Base Station Antenna, Small Cell Antenna & Mosaic™ Products	Two (2) years for all base station antennas except base station antennas incorporating N-type connectors, which shall have a warranty of one (1) year
<b>Category HH Products</b> DryLine® Dehydrator Systems and Line Monitoring Systems	Three (3) years or 3,000 hours of actual run time, whichever occurs first; except the Warranty Period for the compressor is only one (1) year or 1,000 hours of actual run time, whichever occurs first.
<b>Category II Products</b> SiteRise™ Solutions	One (1) year on workmanship for the Solution.
<b>Category JJ Products</b> Copper Structured Cabling Products  Other Enterprise Products (Coax, Automotive Cables, Enterprise Enclosures and miscellaneous items) (excluding software)	One (1) year from the date of Installation
<b>Category KK Products</b> Alifabs™ Services (power upgrades, enablements, installation and decommission work, rigging, and fault management)	One (1) year from the date of completion of the work.
<b>Category LL Products</b> imVision Overlays and Controllers	Three (3) years

*\* For Category H and Category I Products only, if Seller is engaged by Buyer to provide Services for the implementation of the purchased Products, warranty period for such Products shall commence upon Buyer's acceptance of the Products and Services.*

*\*\* For Category T Products only, "Limited Lifetime Warranty" means the period beginning on the Product shipment date and continuing for as long as the original end user of the Product continues to own and use the Product. For Category T1 Products only, "Limited Lifetime Warranty" means the period beginning on the Product shipment date and continuing (i) for as long as the original end user of the Product continues to own and use the Product or (ii) through the End of Support date, as defined in the RUCKUS End of Life Policy, whichever is earlier.*

## RoHS Certificate of Compliance



Product Name: JUMPER,LSZH,LS,1.6MM,DPLX,LC-STD/SC-STD

Product Number: FFXLCSC42

Company Name: CommScope  
3642 E US Highway 70  
Claremont, NC 28610 USA

Contact: ProductCompliance@Commscope.com

Generated on: May 06, 2024

Certified by: 

Vinatha Viswanathan, Director Product Compliance

## Disclaimer

This information is provided based on reasonable inquiry of our suppliers and represents our current actual knowledge based on the information they provided and our analysis and assessment of the risks. This information is subject to change and if a change occurs which affects compliance, then this Statement will be updated. Compliance to EU ROHS 2011/65 amended by EU RoHS 2015/863 means the part numbers have a maximum concentration of no more than 0.1% by weight in homogenous materials for lead, hexavalent chromium, mercury, PBB, PBDE, and 0.01% for cadmium, or qualify for an exemption to these limits as defined in the Annexes of Directive 2011/65/EU (RoHS2). These parts also have a maximum concentration of no more than 0.1% by weight in homogenous materials for DEHP, BBP, DBP and DIBP (substances that are restricted starting from July 22, 2019). Finished electrical and electronic products will be CE marked as required by Directive 2011/65/EU. Components may not be CE marked.

Compliance Status	Regulation	Revision	RoHS exemptions if any
Compliant	ROHS	EU RoHS - 2011/65/EU	

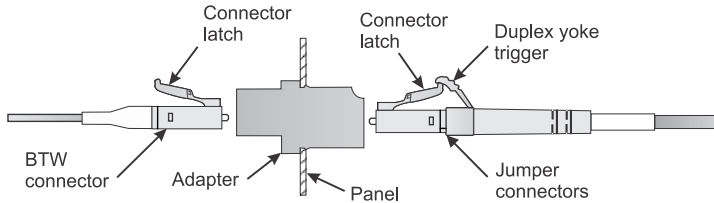


**For optimal connectivity performance, invest in a Fiber Optic Inspection and Cleaning Kit for your installation team.**

CommScope® Cleaning and Inspection Kit – 760053199 -- Consumable Replacement Kit – 760053207

### Install LC Connectors into Adapter

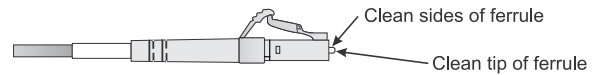
1. Install connectors into the adapter by aligning the latch on the connector with the slot on the adapter and gently push into place. An audible click is heard when the connector snaps into the adapter.
2. If a high-loss condition exists, use the LC cleaning procedures and reinstall the connector as described in Step 1.
3. When doing rearrangements or reinsertions of LC connectors, use the LC cleaning procedures to clean all components and reinstall the connectors as described in Step 1.



### Clean LC Connector and Adapter

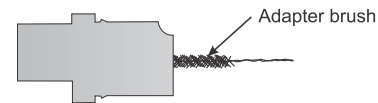
**Clean exposed connector ferrule** by lightly moistening lint-free wipe with fiber optic cleaning solution (or >91% isopropyl alcohol), and by applying medium pressure, first wipe against wet area and then onto dry area to clean potential residue from end face. **Clean connector ferrule** inside adapter by inserting lightly moistened cleaning stick with fiber optic cleaning solution (or >91% isopropyl alcohol) inside the adapter until contact is made with connector on opposite end. Rotate cleaning stick with medium pressure in one circular motion as it is pulled away from the adapter. Repeat process using dry cleaning stick.

**Caution:** Signal strength will be affected if end and sides of ferrule are not thoroughly cleaned. Discard cleaning sticks after each use. Do not turn cleaning sticks back and forth pressing against connector end face. This may cause scratches if large contamination is present. Always inspect connector end face for contamination after each cleaning.



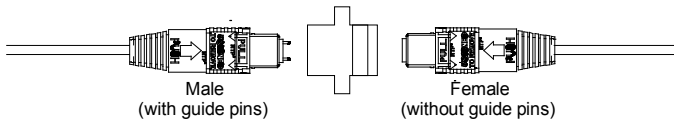
**Clean adapter** by inserting adapter cleaning stick (or fiber adapter sleeve brush) moistened with fiber optic cleaning solution (or >91% isopropyl alcohol) inside the adapter and gently pull out with twisting motion. Repeat process with a dry cleaning stick.

**Caution:** Do not try to clean adapter with a standard pipe cleaner. The sleeve inner diameter of LC adapters is too small. Do not try to clean the adapter with cleaning stick if a connector is mounted in one side. Discard cleaning sticks after each use.



### Install MPO Connectors into MPO Adapter

1. Before installing, remove the dust cap and refer to the MPO cleaning instructions.
2. Attach an MPO connector end into an MPO adapter by aligning the key on the connector body with the keyway in the adapter. Apply enough pressure till you hear a "click" sound, which signifies that the connector is plugged into the adapter.



3. If a high loss is present, remove the MPO connector, use the MPO cleaning instructions and reinstall the connector.
4. Whenever disconnecting and reconnecting the MPO connector, refer to the MPO cleaning instructions before reinstallation.

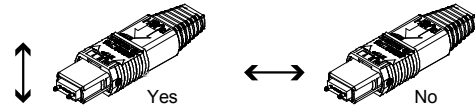
**Warning:** Do not connect male connector ends to each other. Doing so will damage the connector end face. Do not connect two female ends. If you do connect two female ends together, the test results will present a high insertion loss.



### Cleaning the MPO Connector and MPO Adapter

**Clean exposed connector ferrule** by lightly moistening lint-free wipe with fiber optic cleaning solution (or >91% isopropyl alcohol), and by applying medium pressure, first wipe against wet area and then onto dry area to clean potential residue from end face. **Clean connector ferrule** inside adapter by inserting lightly moistened cleaning stick with fiber optic cleaning solution (or >91% isopropyl alcohol) inside the adapter until contact is made with connector on opposite end. Applying medium pressure, wipe the end face in direction perpendicular to fiber array and all the way around each pin. Repeat process using dry cleaning stick.

**Caution:** Signal strength will be affected if end and sides of ferrule is not thoroughly cleaned. Discard cleaning sticks after each use. Do not turn cleaning sticks back and forth pressing against connector end face. This may cause scratches if large contamination is present. To prevent scratching the end face, always clean the MPO connectors with a cleaning motion from top to bottom. Never clean the MPO connector by rubbing across it from side to side.



**Clean adapter** by inserting adapter cleaning stick (or fiber adapter sleeve brush) moistened with fiber optic cleaning solution (or >91% isopropyl alcohol) inside the adapter and gently wiping inside surface. Repeat process with a dry cleaning stick.

**Caution:** Do not try to clean the adapter with cleaning stick if a connector is mounted in one side. Discard cleaning sticks after each use.

- For product information and support, visit us on the web at <http://www.commscope.com/SupportCenter>
- For technical assistance:
  - Within the United States, contact your local account representative or technical support at 1-800-344-0223. Outside the United States, contact your local account representative or Authorized Business Partner.
  - Within the United States, report any missing/damaged parts or any other issues to CommScope Customer Claims at 1-866-539-2795. Outside the United States, contact your local account representative or Authorized Business Partner.

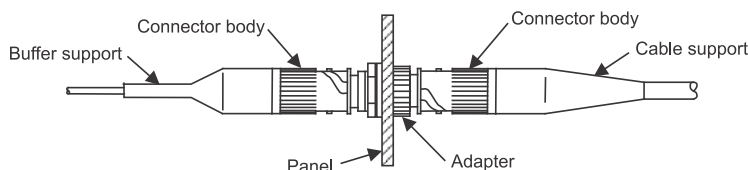
ST<sup>®</sup> and SC Connectors

For optimal connectivity performance, invest in a Fiber Optic Inspection and Cleaning Kit for your installation team.

CommScope<sup>®</sup> Cleaning and Inspection Kit – 760053199  
Consumable Replacement Kit – 760053207

Install ST<sup>®</sup> Connectors into Adapter

1. Install the connectors into the adapter by aligning the mark on the rim of the connector body with the slot in the adapter. Complete the connection by pushing the connector into the adapter with a clockwise twist-locking motion.
2. If a high-loss condition exists, use the ST cleaning procedures and reinstall the connectors as described in Step 1.
3. When doing rearrangements or reinsertions of ST connectors, use the ST cleaning procedures to clean all components and reinstall the connectors as described in Step 1.

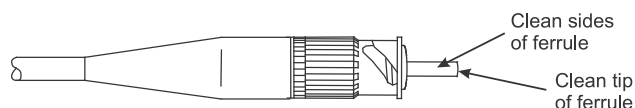


## Clean ST Connector and Adapter

**Clean exposed connector ferrule** by lightly moistening lint-free wipe with fiber optic cleaning solution (or >91% isopropyl alcohol), and by applying medium pressure, first wipe against wet area and then onto dry area to clean potential residue from end face.

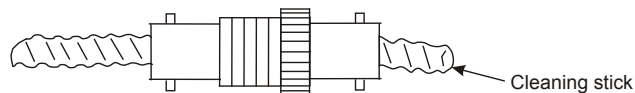
**Clean connector ferrule** inside adapter by inserting lightly moistened cleaning stick with fiber optic cleaning solution (or >91% isopropyl alcohol) inside the adapter until contact is made with connector on opposite end. Rotate cleaning stick with medium pressure in one circular motion as it is pulled away from the adapter. Repeat process using dry cleaning stick.

**Caution:** Signal strength will be affected if end and sides of ferrule are not thoroughly cleaned. Discard cleaning sticks after each use. Do not turn cleaning sticks back and forth pressing against connector end face. This may cause scratches if large contamination is present. Always inspect connector end face for contamination after each cleaning.



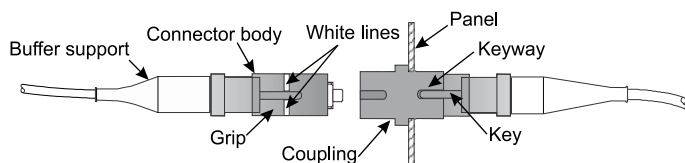
**Clean adapter** by inserting adapter cleaning stick (or fiber adapter sleeve brush) moistened with fiber optic cleaning solution (or >91% isopropyl alcohol) inside the adapter and gently pull out with twisting motion. Repeat process with a dry cleaning stick.

**Caution:** Discard cleaning sticks after each use. Do not try to clean the adapter with cleaning stick if a connector is mounted in one side.



## Install SC Connectors into Adapter

1. Install each connector into the adapter by aligning the key on the connector body with the keyway on the adapter. The connector is properly installed when the white line in the grip disappears inside the adapter.
2. If a high-loss condition exists, use the SC cleaning procedures and reinstall the connectors as described in Step 1.
3. When doing rearrangements or reinsertions of SC connectors, use the SC cleaning procedures to clean all components and reinstall the connectors as described in Step 1.

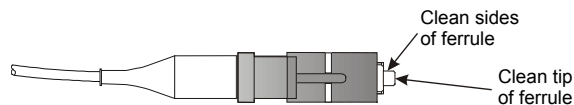


## Clean SC Connector and Adapter

**Clean exposed connector ferrule** by lightly moistening lint-free wipe with fiber optic cleaning solution (or >91% isopropyl alcohol), and by applying medium pressure, first wipe against wet area and then onto dry area to clean potential residue from end face.

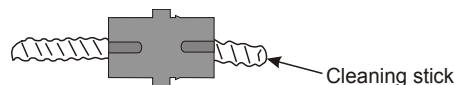
**Clean connector ferrule** inside adapter by inserting lightly moistened cleaning stick with fiber optic cleaning solution (or >91% isopropyl alcohol) inside the adapter until contact is made with connector on opposite end. Rotate cleaning stick with medium pressure in one circular motion as it is pulled away from the adapter. Repeat process using dry cleaning stick.

**Caution:** Signal strength will be affected if end and sides of ferrule are not thoroughly cleaned. Discard cleaning sticks after each use. Do not turn cleaning sticks back and forth pressing against connector end face. This may cause scratches if large contamination is present. Always inspect connector end face for contamination after each cleaning.



**Clean adapter** by inserting adapter cleaning stick (or fiber adapter sleeve brush) moistened with fiber optic cleaning solution (or >91% isopropyl alcohol) inside the adapter and gently pull out with twisting motion. Repeat process with a dry cleaning stick.

**Caution:** Discard cleaning sticks after each use. Do not try to clean the adapter with cleaning stick if a connector is mounted in one side.



# CERTIFICATE

Certificate Number: 111045.000  
Including Seven Page Addendum

The Quality Management System and implementation of:

## CommScope, Inc.

With Virtual Central Function at:  
1100 CommScope Place SE  
Hickory, NC 28602  
United States

meets the requirements of the standard:

## ISO 9001:2015

### Scope:

The sales, marketing, design, manufacture, test, repair, support, service, and distribution of telecommunications products, components, and services for the telecommunications, wireless, and broadcast networks industries

Certificate Expires: January 04, 2026  
Certificate Issued: January 05, 2023  
Certified Since: January 10, 2001

Business Segments	Exceptions
Connectivity and Cable Solutions (CCS)	None
Networking, Intelligent Cellular & Security Solutions (NICS)	None
Outdoor Wireless Networks (OWN)	None
Access Network Solutions (ANS)	None



Dr. Cem O. Onus  
Managing Director

DEKRA Certification, Inc.  
1945 The Exchange SE #300  
Atlanta, GA 30339 USA  
(215) 997-4519  
<https://www.dekra.us/en/audits/>





# CERTIFICATE ADDENDUM

Certificate Number: 111045.000  
ADDENDUM Page One of Seven

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**ISO 9001:2015**

<b>Site Activities Legend:</b>	HQ = Headquarters	MFG = Manufacturing	SER = Services (Professional Services and/or Technical Support)
	HW DE= Hardware Development	REP = Repair	SC = Purchasing, Supplier Management, Manufacturing Support, Repair Support
	SW DE= Software Development	SAL = Sales, Marketing	DIST = Distribution

<b>Site Address</b>	<b>Site Activities</b>
CommScope Inc 1100 CommScope Place SE Hickory, NC 28602 United States	HQ (Virtual)
ARRIS Technology, Inc. 3871 Lakefield Drive Suwanee, GA 30024 United States	HW & SW DE, SAL, SER, SC
ARRIS Technology, Inc. 101 Tournament Dr. Horsham, PA, 19044 United States	HW & SW DE, SAL, SER, SC
ARRIS Technology, Inc. 6450 Sequence Drive San Diego, CA 92121 United States	SW DE, SER
ARRIS Technology, Inc. 900 Chelmsford St. Lowell, MA 01851 United States	HW & SW DE, SER, SC

Certificate Expires: January 04, 2026  
Certificate Issued: January 05, 2023  
Certified Since: January 10, 2001



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# CERTIFICATE ADDENDUM

Certificate Number: 111045.000  
ADDENDUM Page Two of Seven

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**ISO 9001:2015**

Site Address	Site Activities
ARRIS Solutions, Inc. 2400 Ogden Ave., Suite 180 Lisle, IL 60532 United States	HW & SW DE, SAL, SER, SC
ARRIS 15 Sterling Drive Wallingford, CT 06492 United States	HW & SW DE, SER, SC
ARRIS Technology, Inc. 2450/2500 Walsh Avenue Santa Clara, CA 95051 United States	HW & SW DE, SAL, SER
Ruckus Wireless International Inc. 350 West Java Dr. Sunnyvale, CA 94089 United States	HW & SW DE, SER
Ruckus Wireless Network Technology (Shenzhen) Co. Ltd. Units C&D, 5th Floor, No. 2 Finance base, 8 KeFa Road, Shenzhen, China	SW DE, SC, HW DE

Certificate Expires: January 04, 2026  
Certificate Issued: January 05, 2023  
Certified Since: January 10, 2001



Dr. Cem O. Onus  
Managing Director

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# CERTIFICATE ADDENDUM

Certificate Number: 111045.000  
ADDENDUM Page Three of Seven

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**ISO 9001:2015**

Site Address	Site Activities
<b>Site Address</b>	<b>Site Activities</b>
CommScope Asia (Suzhou) Technologies Co., Ltd. 77 Qiming Road, Suzhou Industrial Park Suzhou, Jiangsu 215121 Peoples Republic of China	MFG, SC
Ruckus Wireless International Inc., Taiwan Branch @ Neihs District, Taipei City, Rui Road 411, 10th floor, Taipei	SW DE
ARRIS Group India Pvt Limited (AGIPL) Salarpuria Supreme, Ground Floor West Wing & First Floor Munnekolalu Village, Varthur Hobli, Outer Ring Road, Bangalore-560037	SW DE
ARRIS Group de Mexico S.A. de C.V. Av. La Paz 11721 Parque Industrial Pacifico Tijuana, BC 22643 Mexico	MFG, REP, SC
ARRIS Communications Ireland Limited Building 4300, Cork Airport Business Park Kinsale Road Cork County Ireland	HW & SW DE
ARRIS Group India Private Limited "The Senate" No:33/1, Ulsoor Road, Bangalore - 560 042 India	HW & SW DE

Certificate Expires: January 04, 2026  
Certificate Issued: January 05, 2023  
Certified Since: January 10, 2001



Dr. Cem O. Onus  
Managing Director

DEKRA Certification, Inc.  
1945 The Exchange SE #300  
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# CERTIFICATE ADDENDUM

Certificate Number: 111045.000  
ADDENDUM Page Four of Seven

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**ISO 9001:2015**

Site Address	Site Activities
ARRIS Group, Inc. 50 Stranmillis Embankment Belfast, BT95FL Northern Ireland	SW DE
CommScope Czech Republic, s.r.o. Turanka 856/98B 627 00 Brno Czech Republic	HW DE,
CommScope CZ, spol. s.r.o. U Morusi 888, 53006 Pardubice Czech Republic Czech Republic	HW DE,
CommScope Connectivity UK Limited Units 1 and 4 Kinmel Park Industrial Estate Bodelwyddan, Denbighshire, LL18 5TZ United Kingdom	HW DE, MFG, SAL
CommScope Design & Integration UK Ltd. Unit 5 & 6 Eden Business Park Eden House Drive Old Malton, Malton, North Yorkshire YO17 6AE United Kingdom	HW DE, MFG, SC

Certificate Expires: January 04, 2026  
Certificate Issued: January 05, 2023  
Certified Since: January 10, 2001



Dr. Cem O. Onus  
Managing Director

DEKRA Certification, Inc.  
1945 The Exchange SE #300  
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# CERTIFICATE ADDENDUM

Certificate Number: 111045.000  
ADDENDUM Page Five of Seven

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**ISO 9001:2015**

Site Address	Site Activities
CommScope Design & Integration UK Limited 412 The Quadrant, Birchwood Park Warrington, WA3 6FW United Kingdom	SER
CommScope EMEA Ltd. Corke Abbey Avenue Bray, Co. Dublin Ireland	MFG, SAL
CommScope EMEA Ltd. Diestsesteenweg 692 3010 Kessel-Lo, Belgium	HW DE, MFG, SAL
CommScope Italy Srl Via Archimede, 22/24 Agrate Brianza (MB) 20864 Italy	HW DE, REP, SW DE
Telecom Networks Americas AV. HIPOLITO YRIGROYEN 2999, DEPOSITO 6 EL TALAR, TIGRE Buenos Aires B1618AXD Argentine Republic	SAL, DIST
CommScope Networks India Private Limited Salarpuria Softzone, A Block, 1st Floor Survey No 80/1, 81/1, 81/2, B Wing, Belandur Village, Varthur Hobli, Outer Ring Bangalore – Karnataka 560103 India	SW DE
ADC India Communications Ltd. No 10 C , 2nd Phase Peenya Industrial Area Bangalore – Karnataka 560058 India	MFG, SC

Certificate Expires: January 04, 2026  
Certificate Issued: January 05, 2023  
Certified Since: January 10, 2001



**Dr. Cem O. Onus**  
Managing Director

DEKRA Certification, Inc.  
1945 The Exchange SE #300  
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# CERTIFICATE ADDENDUM

Certificate Number: 111045.000  
ADDENDUM Page Six of Seven

The Quality Management System and implementation of:

**CommScope, Inc.**

With site at:

**CommScope Asia (Suzhou) Technologies Co.,Ltd.**

77 Qiming Road, Suzhou Industrial Park

Suzhou, Jiangsu 215121

Peoples Republic of China

meets the requirements of the standard:

## ISO 9001:2015

The validity of this certificate depends on the validity of the main certificate.

### Scope:

Production of network cable, fiber cable and communication equipment component (copper patch cords, copper panel, accessories etc.)

**Certification Structure:** Multi-site

Certificate Expires:	January 04, 2026
Certificate Issued:	January 05, 2023
Certified Since:	January 10, 2001



Dr. Cem O. Onus  
Managing Director

DEKRA Certification, Inc.

1945 The Exchange SE #300

Atlanta, GA 30339 USA

(215) 997-4519

<https://www.dekra.us/en/audits/>





# 证书附录

证书编号: 111045.000

附录第7页,共7页

质量管理体系和实施:

**CommScope, Inc.**

其场所:

**康普科技 (苏州) 有限公司**

中国江苏省苏州工业园区启明路77号,邮编215121

符合以下标准要求:

## ISO 9001:2015

本证书的有效性取决于主证书的有效性。

### 范围:

网络线、光缆、通信系统设备材料 (网络跳线、配线装置等) 的生产。

认证结构: 多场所

证书有效期: 2026.01.04

发证日期: 2023.01.05

首次发证日期: 2001.1.10



Dr. Cem O. Onus  
Managing Director

DEKRA Certification, Inc.  
1945 The Exchange SE #300  
Atlanta, GA 30339 USA  
(215) 997-4519  
<https://www.dekra.us/en/audits/>



# Certificate of Registration

## ENVIRONMENTAL MANAGEMENT SYSTEM - ISO 14001:2015

This is to certify that:

CommScope, Inc. of North Carolina  
1100 CommScope Place SE  
Hickory  
North Carolina  
28603-0339  
USA


Holds Certificate No:

**EMS 648387**

and operates an Environmental Management System which complies with the requirements of ISO 14001:2015 for the following scope:

The environmental management system to control the risks associated with the manufacture, distribution, field support and central function of telecommunication products and services.

For and on behalf of BSI:

  
Carlos Pitanga, Chief Operating Officer Assurance – Americas

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 1 of 5



...making excellence a habit.™



Certificate No: **EMS 648387**

Location	Registered Activities
Andrew Telecommunications de Reynosa S. de R.L. de C.V. Av. Industrial Reynosa Lte 2 al 5 Parque Industrial Center Reynosa Tamaulipas 88780 Mexico	Manufacture and distribution of telecommunication products including antenna and cable.
CommScope Asia (Suzhou) Technologies Co., Ltd. EPZ II, 77 Qiming Road Suzhou Industrial Park Suzhou Jiangsu 215121 China	Manufacture and distribution of telecommunication products, including cable.
Andrew Telecommunications India Pvt. Ltd. Plot No. N-2, Phase IV Verna Industrial Estate Verna Salcette Goa 403 722 India	Manufacture and distribution of telecommunication products, including antenna and cable.
CommScope EMEA Ltd. Corke Abbey Avenue Bray County Dublin A98FY03 Ireland	Manufacture and distribution of telecommunication products, including cable and connectors.
CommScope Telecommunications (China) Co., Ltd. 68 West Su Hong Xi Lu Suzhou Industrial Park Suzhou Jiangsu 215021 China	Manufacture and distribution of telecommunication products, including antenna and cables.

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 2 of 5

This certificate remains the property of BSI and shall be returned immediately upon request.

An electronic certificate can be authenticated [online](http://www.bsigroup.com/ClientDirectory). Printed copies can be validated at [www.bsigroup.com/ClientDirectory](http://www.bsigroup.com/ClientDirectory). To be read in conjunction with the scope above or the attached appendix.

Information and Contact: BSI, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP. Tel: + 44 345 080 9000  
BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.  
A Member of the BSI Group of Companies.

Certificate No: **EMS 648387**

Location	Registered Activities
Andrew Wireless Systems GmbH Industriering 10 Buchdorf 86675 Germany	Manufacture and distribution of telecommunication products, including amplifiers and antenna systems.
CommScope, Inc. of North Carolina 1100 CommScope Place SE Hickory North Carolina 28603-0339 USA	Corporate headquarters responsible for management system oversight of all locations listed on this certificate.
CommScope Inc. 6519 CommScope Road Catawba North Carolina 28609-0199 USA	Manufacture and distribution of telecommunication products, including cable.
CommScope Inc. 3642 US Hwy 70 East Claremont North Carolina 28610-0879 USA	Manufacture and distribution of telecommunication products, including cable.
CommScope Czech Republic s.r.o. Turanka 98B Brno 62700 Czech Republic	Manufacture and distribution of telecommunication products, including connectors and terminations.
CommScope Inc. of North Carolina 1100 CommScope Place SE Hickory North Carolina 28603-0339 USA	Customer care, facility maintenance, and administrative functions.
ADC de Delicias, S. de R.L. de C.V. Blvd. Fernando Baeza No. 1301 Sur Delicias Chihuahua 33000 Mexico	Manufacturing and distribution of telecommunication products.

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 3 of 5

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BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.

A Member of the BSI Group of Companies.

Certificate No: **EMS 648387**

Location	Registered Activities
ADC de Juarez S. de R.L. de C.V. Parque Industrial Antonio J Bermudez Ciudad Juarez Chihuahua 32470 Mexico	Manufacturing and distribution of telecommunication products.
CommScope Connectivity Belgium bvba Diestsesteenweg 692 Kessel-lo 3010 Belgium	Manufacture and distribution of telecommunication products.
CommScope Technologies de Juarez S. de R.L. de C.V. Santiago Troncoso 331 Praderas del Sur, Ciudad Juarez Chihuahua 32575 Mexico	Manufacture of Fiber Optic Splice Closures (FOSC), Fiber Guide Systems (FGS), Hardened Connectivity and Molding-Gel Filling, including: plastic injection molding, plastic extrusion, plastic and metal machining, and assembly operations.
CommScope Connectivity UK Limited Unit 1 Kinmel Park Bodelwyddan Rhyl, Denbighshire LL18 5TZ United Kingdom	Fibre optic cable manufacturing, termination and design of other telecommunication products and services.
CommScope 11312 S. Pipeline Road Eules Texas 76040 USA	Manufacture, distribution, field support and central function of telecommunication products.
ARRIS GROUP DE MEXICO SA DE CV Av. De la Paz, #11721 Parque Industrial Pacifico Tijuana Baja California 22643 Mexico	Manufacture, repair, support, repair service, distribution of products and components for telecommunications that provide integrated solutions for voice, video and data through the processes of SMT, manual and mechanical assembly, soldering (manual, selective, printed, wave) electrical testing and packaging.

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 4 of 5

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BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.

A Member of the BSI Group of Companies.

Certificate No: **EMS 648387**

Location	Registered Activities
CommScope Design & Integration UK Ltd Unit 5 & 6, Eden Business Park Edenhouse Drive Old Malton Malton YO17 6AE United Kingdom	Manufacture and distribution of telecommunications products including cabinets.
Arris Indústria Eletrônica do Brasil Ltda. CNPJ: 09.154.836/0001-15 Avenida Torquato Tapajós, 9475 Tarumã Manaus Amazonas 69041-025 Brasil	Manufacturer and distribution of Receivers, Television signal Decoders and Modulator/Router.
CommScope Design and Integration UK Ltd. Lovell House, 412 The Quadrant Birchwood Park Warrington WA3 6FW United Kingdom	Telecommunications project management, site surveys, installations commissioning and rigging.

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 5 of 5

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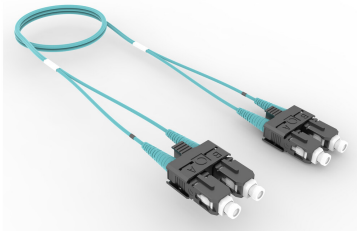
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Information and Contact: BSI, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP. Tel: + 44 345 080 9000  
BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.  
A Member of the BSI Group of Companies.



# FFXSCSC42

## Base Product



OM4 SC/UPC to SC/UPC, Fiber Patch Cord, 1.6 mm Duplex, Low Smoke Zero Halogen (LSZH)

## Product Classification

Regional Availability	Asia   Australia/New Zealand   China   Europe   India   Latin America   Middle East/Africa   North America
Portfolio	CommScope®
Product Type	Fiber patch cord, duplex
Product Brand	SYSTIMAX InstaPATCH® 360
Product Series	FFX
Ordering Note	For lengths greater than 999 ft (304 m), orders must be in meters   Minimum length may vary based on cable configuration

## General Specifications

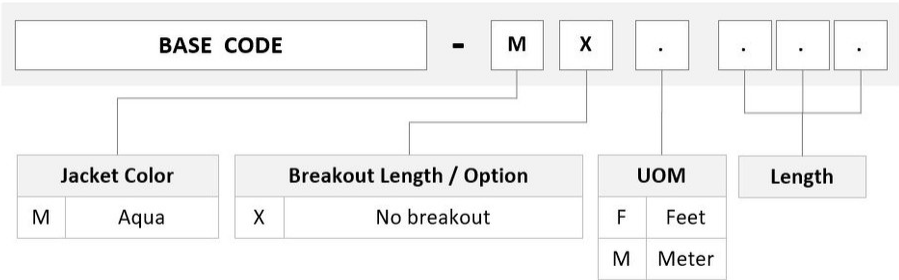
Color, boot A	Aqua
Color, connector A	Black
Color, boot B	Aqua
Color, connector B	Black
Interface, Connector A	SC/UPC
Interface, Connector B	SC/UPC
Jacket Color	Aqua
Polarity	Pairs, flipped
Total Fibers, quantity	2

## Dimensions

Cable Assembly Length Range (m)	1 – 999
Cable Assembly Length Range (ft)	1 – 999
Diameter Over Jacket	1.6 mm   0.063 in

## Ordering Tree

# FFXSCSC42



## Mechanical Specifications

**Cable Retention Strength, maximum** 11.24 lb @ 0 ° | 4.40 lb @ 90 °

## Optical Specifications

**Fiber Mode** Multimode  
**Fiber Type** OM4, LazrSPEED®

## Environmental Specifications

**Operating Temperature** -10 °C to +60 °C (+14 °F to +140 °F)  
**Operating Temperature, pending approval** -20 °C to +70 °C (-4 °F to +158 °F)  
**Environmental Space** Dual Rated LSZH/Riser

## Packaging and Weights

**Packaging quantity** 1

## Regulatory Compliance/Certifications

Agency	Classification
ANATEL	Compliant
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on <a href="https://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a>
ROHS	Compliant
UK-ROHS	Compliant

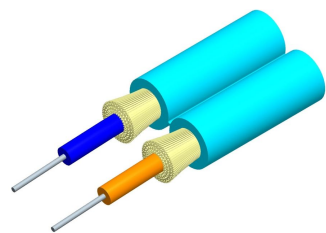


# FFXSCSC42

---

## Included Products

- |                     |   |  |
|---------------------|---|--|
| 760021659           | – | Fiber Indoor Cable, LazrSPEED® 1.6 mm Low Smoke Zero Halogen Riser, 2-fiber Zipcord, |
| N-002-ZC-5K-F16AQ/E |   | Multimode OM4, Feet jacket marking, Aqua jacket color, Eca Flame Rating              |
| 860652876           | – | SC/PC Connector, Multimode, Aqua   |



Fiber Indoor Cable, LazrSPEED® 1.6 mm Low Smoke Zero Halogen Riser, 2-fiber Zipcord, Multimode OM4, Feet jacket marking, Aqua jacket color, Eca Flame Rating

Product Classification

Regional Availability	Asia   Australia/New Zealand   EMEA   Latin America   North America
Portfolio	CommScope®
Product Type	Fiber indoor cable
Product Series	N-ZC

General Specifications

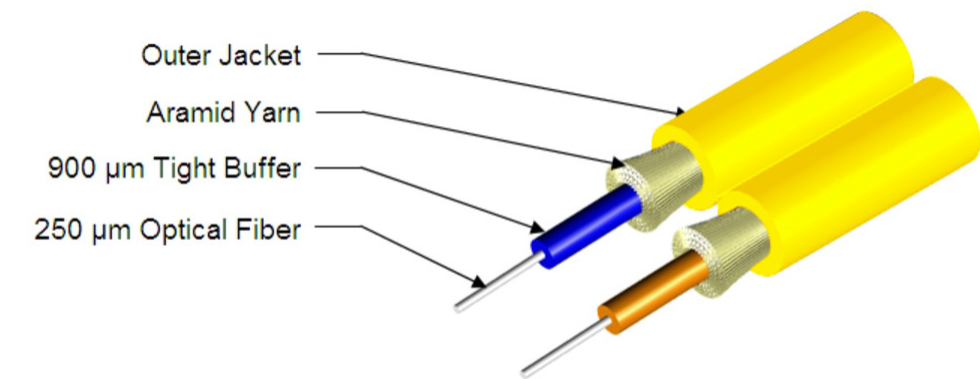
Cable Type	Cordage
Construction Type	Non-armored
Subunit Type	Gel-free
Jacket Color	Aqua
Jacket Marking	Feet
Total Fiber Count	2

Dimensions

Height Over Jacket	1.7 mm   0.067 in
Width Over Jacket	3.5 mm   0.138 in

Representative Image





Mechanical Specifications

Minimum Bend Radius, loaded	38 mm   1.496 in
Minimum Bend Radius, unloaded	15 mm   0.591 in
Tensile Load, long term, maximum	53 N   11.915 lbf
Tensile Load, short term, maximum	178 N   40.016 lbf
Compression	10 N/mm   57.101 lb/in
Compression Test Method	FOTP-41   IEC 60794-1 E3
Flex	300 cycles
Flex Test Method	FOTP-104   IEC 60794-1 E6
Impact	0.74 N-m   6.55 in lb
Impact Test Method	FOTP-25   IEC 60794-1 E4
Strain	See long and short term tensile loads
Strain Test Method	FOTP-33   IEC 60794-1 E1
Twist	10 cycles
Twist Test Method	FOTP-85   IEC 60794-1 E7
Vertical Rise, maximum	500 m   1,640.42 ft

Optical Specifications

Fiber Type	OM4, LazrSPEED® 550   OM4, LazrSPEED® 550
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Environmental Specifications

Installation temperature	-20 °C to +60 °C (-4 °F to +140 °F)
--------------------------	-------------------------------------

Operating Temperature	-20 °C to +70 °C (-4 °F to +158 °F)
Storage Temperature	-40 °C to +70 °C (-40 °F to +158 °F)
Cable Qualification Standards	ANSI/ICEA S-83-596   Telcordia GR-409
EN50575 CPR Cable EuroClass Fire Performance	Eca
Environmental Space	Low Smoke Zero Halogen (LSZH)   Riser
Flame Test Listing	NEC OFNR-ST1 (ETL) and c(ETL)
Flame Test Method	IEC 60332-1-2   IEC 60332-3   IEC 60754-2   IEC 61034-2   UL 1666   UL 1685

## Environmental Test Specifications

Heat Age	-20 °C to +85 °C (-4 °F to +185 °F)
Heat Age Test Method	IEC 60794-1 F9
Low High Bend	-20 °C to +70 °C (-4 °F to +158 °F)
Low High Bend Test Method	FOTP-37   IEC 60794-1 E11
Temperature Cycle	-20 °C to +70 °C (-4 °F to +158 °F)
Temperature Cycle Test Method	FOTP-3   IEC 60794-1 F1

## Packaging and Weights

Cable weight	6 kg/km   4.032 lb/kft
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## Regulatory Compliance/Certifications

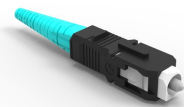
Agency	Classification
CENELEC	EN 50575 compliant, Declaration of Performance (DoP) available
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a>
ROHS	Compliant
UK-ROHS	Compliant



### \* Footnotes

Operating Temperature	Specification applicable to non-terminated bulk fiber cable
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SC/PC Connector, Multimode, Aqua



Product Classification

Regional Availability	Asia   Australia/New Zealand   EMEA   Latin America   North America
Portfolio	CommScope®
Product Type	Fiber connector

General Specifications

Color, boot	Aqua
Color, housing	Black
Interface	SC/UPC

Dimensions

Length	48 mm   1.89 in
Compatible Cable Diameter	1.6 mm   0.063 in   2 mm   0.079 in

Material Specifications

Ferrule Material	Zirconia
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Mechanical Specifications

Cable Retention Strength, maximum	15.73 lb @ 0 °
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Optical Specifications

Fiber Mode	Multimode
Insertion Loss Change, mating	0.2 dB
Optical Components Standard	ANSI/TIA-568. 3-D   IEC 61753-1
Insertion Loss Change, temperature	0.2 dB
Insertion Loss, maximum	0.24 dB
Return Loss, minimum	27 dB

\* Footnotes

<b>Insertion Loss Change, mating</b>	TIA-568: Maximum insertion loss change after 500 matings
<b>Insertion Loss Change, temperature</b>	Maximum insertion loss change from -10 °C to +60 °C (+14 °F to +140 °F)



## LIMITED WARRANTY



1. **Definitions.** For purposes of this Warranty, (i) "Buyer" shall mean the individual or entity identified on the applicable purchase order or supply agreement (or, if different, on Seller's quotation, order acknowledgement or statement of work ), (ii) "Seller" shall mean the CommScope entity identified on such entity's quotation, order acknowledgement, statement of work or supply agreement, (iii) "Hardware" means equipment designed and manufactured by or on behalf of Seller, or any third-party manufacturer's equipment offered for sale by Seller to Buyer, (iv) "Product" shall mean a product manufactured by or on behalf of Seller pursuant to the applicable supply agreement, quotation or order acknowledgement, and includes any combination of Hardware and Software, (v) "Services" means site engineering, system integration, product installation, implementation, training, maintenance and technical support services for Products, or other professional services provided by Seller to Buyer. Services exclude managed services and hosted cloud services provided by Seller, (vi) "Software" means Seller-licensed software, either embedded or standalone, including any updates provided, and any other enhancements, modifications, and bug fixes provided thereto, in object code form only (unless otherwise specified), and any full or partial copies thereof. Software does not include software created or owned by third parties, including but not limited to MediaKind Software, Google's Android Software or any third party application software, and (vii) "Warranty Period" means, unless a different time period is set forth in **Exhibit A**, (a) for Hardware, one year from date of original shipment from Seller's facility, (b) for Software-only Products, ninety (90) days from the date such Software is first made available to Buyer, or for Software embedded in a Hardware Product, ninety (90) days from date of original shipment of the Product from Seller's facility, and (c) for Services, thirty (30) days from the date the performance of such Services has been rendered.

2. **Limited Warranty.** Seller warrants that, as of the date of delivery, Seller has good title to the Product, free from any lawful security interest or other lien or encumbrance unknown to Buyer. In addition, during the Warranty Period, the Product and Services will be free from defects in materials or workmanship arising under proper and normal use. This Warranty shall apply only to the Products and Services and shall not apply to any other goods or materials, parts or components of a system or any system as a whole. This Warranty does not cover ordinary wear and tear. Seller does not warrant (i) Products not purchased from Seller or its authorized resellers; (ii) that the operation of the Product will be uninterrupted or error-free; (iii) that the Product will operate in combination with other third-party products selected by Buyer; or (iv) any products manufactured by third parties; provided that Seller will, to the extent permitted by the manufacturer, assign third-party warranties to Buyer. Seller gives no warranty for, and shall have no liability with respect to, any defects arising from any software (other than the Software), including, but not limited to MediaKind Software, Android Software or any third-party application software, downloaded to or otherwise used in conjunction with the Product. Seller further warrants to Buyer that during the Warranty Period, all Services performed by Seller for Buyer will be provided in a workmanlike manner.

3. **Disclaimers.** EXCEPT AS EXPRESSLY SET FORTH IN THIS LIMITED WARRANTY OR IN A SEPARATE, APPLICABLE SOFTWARE LICENSE AGREEMENT, ALL SOFTWARE IS LICENSED ON AN "AS IS" BASIS WITHOUT WARRANTY.

4. **Inspection and Return Authorization.** Buyer must promptly notify Seller of any claimed defect in the Product and/or Services. If Buyer claims that a Product is defective in materials or workmanship, Seller shall have the right to either examine the Product where it is located or, in its sole discretion, issue shipping instructions for return of the Product. Seller's inspection in response to a warranty claim shall not constitute acceptance or acknowledgment of the claim's validity. Except as otherwise agreed to in writing, Products may not be returned to Seller without prior authorization. Buyer must contact Seller to obtain an authorization number and return the Products to the location designated by Seller. Any Products returned to Seller without proper authorization will be returned to Buyer at Buyer's expense. Risk of loss, damage and insurance responsibilities for the Products shall not pass from Buyer to Seller until delivery of the Products to Seller's designated location. Buyer shall prepay all transportation charges for such return.

5. **Remedies.** Seller's sole and exclusive obligation and Buyer's exclusive remedy under this Warranty is Seller's repair or replacement of the defective Product or re-performance of Services or issuance of a credit for the net book value of the purchase price of the defective Product. Seller shall have sole discretion as to which of these remedies Seller will provide. Seller is not liable for any repair or maintenance costs incurred by Buyer, unless Seller authorizes such charges in writing in advance of the commencement of the work. If Seller elects to replace or repair the defective Product, the replaced or repaired Product will be warranted for the remainder of the Warranty Period applicable to the originally shipped Product, but the Warranty shall not be extended beyond the original Warranty Period. Replacement Products may be new, refurbished or contain refurbished materials.

6. **Notice and Waiver.** If Buyer discovers any defect in the Product, Buyer must provide prompt (and in no case later than thirty (30) days after discovery) written notice to Seller of the claimed defect. Such notice shall describe, in reasonable detail, the symptoms of such defect. The notice must be received by Seller during the Warranty Period for such Product. Failure to give timely notice of a claim shall result in Buyer's waiver of such claim.

7. **Transfer of Ownership.** This Warranty is not transferable unless Buyer is expressly authorized by Seller in writing to resell the Product. In addition, Buyer must notify Seller on or before the fifteenth (15<sup>th</sup>) day after the date on which it transfers ownership of the warranted Product. Any transfers in violation of this Section shall invalidate this Warranty. Notice of the transfer of ownership must be in writing and shall include the name and address of the new owner.

8. **Exclusions from Warranty.** This Warranty shall not apply to problems attributable to, or as a result of:

- (a) improper installation or misapplication of parts;
- (b) chain or system failures induced by other products or components;
- (c) lack of proper inspection or maintenance or failure to provide a suitable operating environment;
- (d) any consumables provided with the Product, including but not limited to batteries and other accessories, and any other materials, components or products manufactured by a third party;
- (e) power surges, fire, unusual mechanical, physical or electrical stress, severe weather conditions or acts of nature, including but not limited to, lightning or floods;
- (f) usage or operation not in accordance with published ratings, specifications or instructions, including but not limited to environmental specifications identified by Seller;
- (g) any adjustment, modification, alteration, removal or repair of any part of the Product, including but not limited to removal or alteration of serial numbers or other identifying marks not expressly authorized by Seller in writing;
- (h) accidental damage, misuse, abuse, neglect or unauthorized access of the Product or of any system of which the warranted Product is a part;
- (i) any type of aesthetic changes due to oxidation or corrosion occurring on stainless steel or galvanized steel parts installed in unusually corrosive marine and industrial atmospheres (in which case Seller's only obligation shall be to ensure that Product complies with Seller's published material specifications);
- (j) use of the Product for purposes other than that for which it was designed; or
- (k) mishandling during shipment of the Product.

## LIMITED WARRANTY

This Warranty is for Products installed and used in accordance with Seller's design, installation and operating parameters. Buyer's failure to ensure conformity with such parameters will void all warranties. Under no circumstance shall Seller have any liability or obligation with respect to expenses, liabilities or losses associated with the installation or removal of any Product or the installation or removal of any components for inspection, testing or redesign occasioned by any defect or by any repair or replacement of a Product.

9. **Limitation on Liability.** THE WARRANTIES SET FORTH IN SECTION 2 HEREOF ARE EXCLUSIVE AND ARE MADE ONLY TO BUYER. SELLER MAKES NO OTHER REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, AND SPECIFICALLY DISCLAIMS AND EXCLUDES ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY, NONINFRINGEMENT OR FITNESS FOR A PARTICULAR PURPOSE AND ANY REPRESENTATION OR WARRANTY ARISING BY USAGE OF TRADE, COURSE OF DEALING OR COURSE OF PERFORMANCE. No person is authorized to give any additional warranties on Seller's behalf or to assume for Seller any other liability, except in a writing signed by an authorized officer of Seller. SELLER'S TOTAL LIABILITY FOR ANY CLAIM OR DAMAGE ARISING OUT OF AND/OR IN CONNECTION WITH THE MANUFACTURE, SALE, DELIVERY OR USE OF THE PRODUCTS OR SERVICES WILL BE LIMITED TO PROVEN DIRECT DAMAGES, NOT TO EXCEED (I) FOR PRODUCTS, THE DEPRECIATED VALUE OF THE PURCHASE PRICE OF SUCH PRODUCTS OR (II) FOR SERVICES, THE ACTUAL AMOUNT PAID TO SELLER FOR SERVICES DURING THE 12 MONTH PERIOD IMMEDIATELY PRIOR TO THE EVENT (OR SERIES OF EVENTS) GIVING RISE TO THE LIABILITY. IN NO EVENT WILL SELLER BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL OR PUNITIVE DAMAGES, INCLUDING, WITHOUT LIMITATION, ANY CLAIM FOR LOSS OF ACTUAL OR ANTICIPATED DATA, USE, REVENUES OR PROFITS. The Products are not specifically designed, tested, manufactured or intended for operation or use in any inherently dangerous, life endangering or life support applications where any failure of the Products could lead to death, personal injury or significant physical or environmental damage (High Risk Activities). If Buyer uses the Products in High Risk Activities, including but not limited to nuclear facilities or the flight, navigation or communication of aircraft, Buyer agrees that neither Seller nor its third party licensors are liable in whole or in part, for any claims or damages arising from such use, and that Buyer shall indemnify and hold Seller and its third party licensors harmless from any and all claims for loss, cost, damage, expense or liability arising out of or in connection with any use of the Products in High Risk Activities. These limitations on liability will apply regardless of the form of action, whether in contract, tort, strict liability or otherwise, and whether damages were foreseeable and will survive failure of any exclusive remedies provided in Section 4 hereof.

10. **Choice of Law.** The terms and conditions contained herein and the rights of the parties to any transaction to which they relate shall be governed by and construed in accordance with the laws of the State of North Carolina, U.S.A. The United Nations Convention on Contracts for the International Sale of Goods shall not apply.

## LIMITED WARRANTY

### Exhibit A

Product Categories	Warranty Period from Original Shipment Date*
<b>Category A Products</b> E6000® Converged Edge Router (CER); E6000n™ Remote PHY Devices (RPDs); E6000r™ Remote PHY Shelves; E6000n™ Remote MACPHY Devices (RMDs); vManager; Remote OLT (R-OLT); associated power supplies and accessories. FLX PON OLT portfolio including vOLT. CherryPicker products, Encoder products including ME-7000, SE-6000; DSR-4xxx, DSR-6xxx and DSR-7xxx series IRD products, and Uplink systems including TME-2020, VDP-1000, BNC, DEM, and SEM; All APEX Universal EQAM including APEX1000 and APEX3000; All Aloha interactive products including OM2000, ARPD, ADM4000 and NC1500 4.0. All SDM products. All VUE and VTM Software Products. All STDC products.	Hardware One (1) Year Software Ninety (90) Days
<b>Category B Products</b> All High and Standard Definition Transport Adapter MS4000™ Media Streamer	Hardware One (1) Year Software Ninety (90) days ** For certain CPE, option for 1% overship in lieu of Hardware warranty is standard
<b>Category C Products</b> Intentionally left blank.	
<b>Category D Products</b> All Third Party OEM Products: power meters; All VUE and VTM hardware platforms; NC1500 4.0 hardware platform; LQA256 Legacy QAM Adapter; Elemental Products including Live, Server, Delta, Conductor and StatMux; DC2180 Cabinet Node, Cooling Systems	Pass Through from OEM: Hardware One (1) Year Software Ninety (90) Days
<b>Category E Products</b> Intentionally left blank	
<b>Category F Products</b> All OM and SG optical node platforms, Flex Max® and Starline® amplifier platforms, RF Taps & Passives, and Optical Passives	Hardware Five (5) Years within the United States and Canada Hardware Three (3) Years outside United States and Canada Software Ninety (90) Days
<b>Category F1 Products</b> All CHP Headend Optical (HEO) Elements	Hardware Three (3) Years Software Ninety (90) Days
<b>Category G1 Products</b> All NC optical node platforms and Optical Passives, including OP/NP/DP/DC models.	Hardware Five (5) Years Software Ninety (90) Days
<b>Category G2 Products</b> All CH3 Headend (HEO) Elements	One (1) year
<b>Category G3 Products</b> All EPON and GPON ONUs, RFoG/HPON R-ONUs, including, CP8 models and associated power supplies and accessories	Hardware Three (3) Years Software Ninety (90) Days

## LIMITED WARRANTY

<b>Category H Products</b> All ConvergeMedia™ Distribution Platforms and Management Suite, AdManager™ including SkyVision Ad Management and EMP solutions CVEx™, SVA, all Vertasent products including SVOM, SVM and ERM, AdEdge™ COM and AdEdge APS,VMS, Manifest Delivery Controller (MDC), ARRIS Video Content Manager (AVCM) and Next Generation Insertion (NGI) and Multicast ABR.	Hardware One (1) Year Software Ninety (90) Days
<b>Category I Products</b> ServAssure® Advanced, ServAssure® NXT - Alarm Central, ServAssure® NXT - Analyze, ServAssure Domain Manager and EventAssure™. WorkAssure™® Workforce Management, Mobile TV, SecureMedia and Titanium	Hardware One (1) Year Software Ninety (90) Days
<b>Category J Products</b> Intentionally left blank	
<b>Category K Products</b> Intentionally left blank.	
<b>Category L Products</b> Intentionally left blank	
<b>Category M Products</b> Intentionally left blank.	
<b>Category N Products</b> Intentionally left blank.	
<b>Category O Products</b> All CAS Products including DAC, CASMR (and associated plug-ins), CAST, Advisor, CSS, OLL, CSS-Lite, KLS, DKS, CPMS	DAC, CASMR, CAST, Advisor, CSS Hardware Three (3) Years OLL, CSS-Lite, KLS, DKS, OLES, CPMS Hardware One (1) Year Software Ninety (90) Days
<b>Category P Products</b> Intentionally left blank.	
<b>Category P1 Products</b> Intentionally left blank	
<b>Category Q Products</b> Intentionally left blank	
<b>Category R Products</b> Intentionally left blank	
<b>Category R1 Products</b> Intentionally left blank	
<b>Category S Products</b> Intentionally left blank	
<b>Category S1 Products</b> Intentionally left blank	



## LIMITED WARRANTY

<p><b>Category T Products</b> RUCKUS Wi-Fi</p>	<p>Hardware:</p> <ul style="list-style-type: none"> <li>- Indoor Access Points and Wall Plate Access Points – Limited Lifetime Warranty,** except for access points with an “e” suffix (e.g., R350e), for which the HW warranty period is one (1) year.</li> <li>- Outdoor Access Points – One (1) Year</li> <li>- Controllers – One (1) Year, except ZoneDirector controllers are covered by the Limited Lifetime Warranty**</li> </ul> <p>Software Ninety (90) Days</p>
<p><b>Category T1 Products</b> RUCKUS ICX Switches</p>	<ul style="list-style-type: none"> <li>- ICX Switches (including switch modules, PSUs, and Fans, but excluding removable optics/transceivers and LEDs) – Limited Lifetime Warranty,** except for ICX 7150- C08PT, for which the HW warranty period is 13 months.</li> <li>- LEDs – 12 months</li> <li>- Removable Optics/Transceivers – 60 months (13 months if shipped from Seller prior to June 1, 2021)</li> </ul> <p>Software: Limited lifetime access to defect repairs, and software maintenance updates through end of support date of product</p>
<p><b>Category T2 Products</b> Intentionally left blank</p>	
<p><b>Category U Products</b></p> <p>Other OSP Cable Products (P3®, Drop Coax, Fiber Cable, Fiber Drop Cable, CIC)</p> <p>NovuX Products</p> <p>Prodigy</p> <p>Products FDH</p> <p>Products</p> <p>Multiservice terminals (MST), Open Terminals (OTE) and Hardened Drop Cable</p> <p>Assemblies OSP “Box” Products</p> <p>Mini-RDTs and RDTs</p> <p>FOSC™, FIST™ and</p> <p>Tenio™</p> <p>OSP Copper Connect and Closure Products</p> <p>HELIAX® FiberFeed® Products, including FiberFeed® hybrid and fiber cables and assemblies, power cables and junction boxes</p> <p>Fiber Optic Panels, including Accessories, Mounting Hardware, Modules</p> <p>Fiber Optic Field Terminated Connectors, Kits, Tools, Consumables,</p> <p>Accessories Indoor Fiber Cable, Patch Cords, Cable Assemblies, Fiber Trunks</p> <p>Passive Optical Components and Value Added Modules (VAMs)</p> <p>FiberGuide® : Fiber cable Management System</p> <p>Optical Distribution Frames, including Modules, Blocks, Accessories and</p> <p>Hardware Cabinets Cable and Apparatus Products</p> <p>Alifabs™ Cabinets &amp; Ancillary Products</p> <p>Alifabs™ Telecommunications Towers and Accessories</p> <p>Metro Cell Products, including Enclosures; Integrated Pole; Standard Poles; Accessories; and Wood Pole Brackets</p>	<p>One (1) year</p>

## LIMITED WARRANTY

<b>Category V Products</b> ValuDAS® Passive Products, including Air Directional Couplers, Hybrid Couplers, High Power Splitters, and Cell-Max™ Antennas Standard Tower Mounted Amplifier, Bias Tee and Power Distribution Unit Products Standard Filter & Combiner Products  Electronic Enclosure Products (Cabinets)  Alifabs™ Free Cooling Products and Accessories and Spare Parts, including  Monitor All-In-One FLX (Active Passive Cabines)  PowerShift™ & Power Products	Two (2) years
<b>Category W Products</b> ValuSite® Products  I-Line Accessory Products  Microwave Antennas  Terrestrial Microwave System Products (including Microwave System Flex-Twist, Coupler, Filter and Diplexer Products)	Three (3) years
<b>Category X Products</b> Broadband RF Connectivity Products   Premium Passive Products, including In-Building Directional Couplers, Hybrid Matrices, Tappers, Power Splitters, Terminations, Attenuators and CMAX Antenna Products	Five (5) years
<b>Category Y Products</b> QR® Coaxial Cable	Five (5) years
<b>Category Z Products</b> Standard RADIAX® Cable, Connector, Accessory and Cable Assembly* Products  * RADIAX® Cable Assembly Product means any RADIAX® coaxial cable that has been fitted with Seller's connectors in accordance with the installation instructions.	One (1) year
<b>Category AA Products</b> Standard CNT® Cable, Connector, Accessory and Cable Assembly* Products  * CNT® Cable Assembly Product means any CNT® coaxial cable that has been fitted with Seller's connectors by Seller or its certified distributor	Five (5) years; except that the Warranty Period for Products purchased for resale purposes shall be one (1) year.
<b>Category BB Products</b> Standard HELIAX® Cable, Connector, Accessory and Cable Assembly* Products  * HELIAX® Cable Assembly Product means any HELIAX® coaxial cable or elliptical waveguide that has been fitted with Seller's connectors by Seller or its certified distributor.	Ten (10) years; except for the following: (i) three (3) years for weatherproofing kits (including SureGuard boots); (ii) one (1) year for cable preparation tools (excluding blades); (iii) one year for single click-on hanger kits; and (iv) two (2) years for surge arrestors.
<b>Category CC Products</b> Standard ERA/ION-E®, ION-M®, ION-U®, MR, CMR, i-POI®, e-POI™, and Node Repeater Products	Hardware, the earlier of: (i) one (1) year from the date of installation; or (ii) fifteen (15) months from the date of shipment. Software Ninety (90) Days
<b>Category DD Products</b> In- Building and Fixed Subscriber Antennas	The earlier of: (i) three (3) years from the date of installation or (ii) thirty-nine (39) months from the date of original shipment

## LIMITED WARRANTY

<b>Category EE Products</b> OneCell®  Powered Fiber Cable Solution: Hybrid Copper and Fiber Cables, Class 2 Power Supplies, Indoor/Outdoor POE Extenders, Field Terminated Outlets, Consolidation Boxes and Related Passive Components	Hardware, the earlier of: (i) one (1) year from the date of installation; or (ii) fifteen (15) months from the date of original shipment Software Ninety (90) Days
<b>Category FF Products</b> Small Cell Device Management System (DMS) Software DAS Device Management System (AIMOS) Software	Ninety (90) days
<b>Category GG Products</b> Base Station Antenna, Small Cell Antenna & Mosaic™ Products	Two (2) years for all base station antennas except base station antennas incorporating N-type connectors, which shall have a warranty of one (1) year
<b>Category HH Products</b> DryLine® Dehydrator Systems and Line Monitoring Systems	Three (3) years or 3,000 hours of actual run time, whichever occurs first; except the Warranty Period for the compressor is only one (1) year or 1,000 hours of actual run time, whichever occurs first.
<b>Category II Products</b> SiteRise™ Solutions	One (1) year on workmanship for the Solution.
<b>Category JJ Products</b> Copper Structured Cabling Products  Other Enterprise Products (Coax, Automotive Cables, Enterprise Enclosures and miscellaneous items) (excluding software)	One (1) year from the date of Installation
<b>Category KK Products</b> Alifabs™ Services (power upgrades, enablements, installation and decommission work, rigging, and fault management)	One (1) year from the date of completion of the work.
<b>Category LL Products</b> imVision Overlays and Controllers	Three (3) years

*\* For Category H and Category I Products only, if Seller is engaged by Buyer to provide Services for the implementation of the purchased Products, warranty period for such Products shall commence upon Buyer's acceptance of the Products and Services.*

*\*\* For Category T Products only, "Limited Lifetime Warranty" means the period beginning on the Product shipment date and continuing for as long as the original end user of the Product continues to own and use the Product. For Category T1 Products only, "Limited Lifetime Warranty" means the period beginning on the Product shipment date and continuing (i) for as long as the original end user of the Product continues to own and use the Product or (ii) through the End of Support date, as defined in the RUCKUS End of Life Policy, whichever is earlier.*

## RoHS Certificate of Compliance

COMMScope®

Product Name: JUMPER,LSZH,LS,1.6MM,DPLX,SC-STD/SC-STD

Product Number: FFXSCSC42

Company Name: CommScope  
3642 E US Highway 70  
Claremont, NC 28610 USA

Contact: ProductCompliance@Commscope.com

Generated on: May 06, 2024

Certified by: 

Vinatha Viswanathan, Director Product Compliance

## Disclaimer

This information is provided based on reasonable inquiry of our suppliers and represents our current actual knowledge based on the information they provided and our analysis and assessment of the risks. This information is subject to change and if a change occurs which affects compliance, then this Statement will be updated. Compliance to EU ROHS 2011/65 amended by EU RoHS 2015/863 means the part numbers have a maximum concentration of no more than 0.1% by weight in homogenous materials for lead, hexavalent chromium, mercury, PBB, PBDE, and 0.01% for cadmium, or qualify for an exemption to these limits as defined in the Annexes of Directive 2011/65/EU (RoHS2). These parts also have a maximum concentration of no more than 0.1% by weight in homogenous materials for DEHP, BBP, DBP and DIBP (substances that are restricted starting from July 22, 2019). Finished electrical and electronic products will be CE marked as required by Directive 2011/65/EU. Components may not be CE marked.

Compliance Status	Regulation	Revision	RoHS exemptions if any
Compliant	ROHS	EU RoHS - 2011/65/EU	

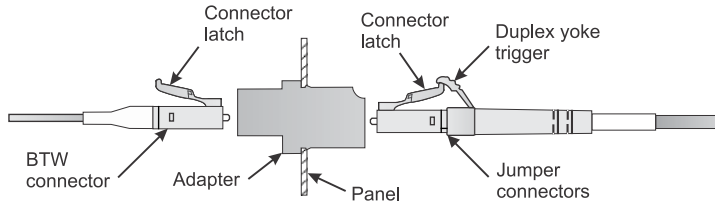


**For optimal connectivity performance, invest in a Fiber Optic Inspection and Cleaning Kit for your installation team.**

CommScope® Cleaning and Inspection Kit – 760053199 -- Consumable Replacement Kit – 760053207

### Install LC Connectors into Adapter

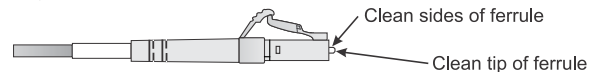
1. Install connectors into the adapter by aligning the latch on the connector with the slot on the adapter and gently push into place. An audible click is heard when the connector snaps into the adapter.
2. If a high-loss condition exists, use the LC cleaning procedures and reinstall the connector as described in Step 1.
3. When doing rearrangements or reinsertions of LC connectors, use the LC cleaning procedures to clean all components and reinstall the connectors as described in Step 1.



### Clean LC Connector and Adapter

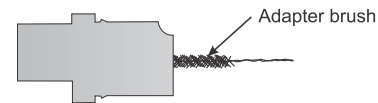
**Clean exposed connector ferrule** by lightly moistening lint-free wipe with fiber optic cleaning solution (or >91% isopropyl alcohol), and by applying medium pressure, first wipe against wet area and then onto dry area to clean potential residue from end face. **Clean connector ferrule** inside adapter by inserting lightly moistened cleaning stick with fiber optic cleaning solution (or >91% isopropyl alcohol) inside the adapter until contact is made with connector on opposite end. Rotate cleaning stick with medium pressure in one circular motion as it is pulled away from the adapter. Repeat process using dry cleaning stick.

**Caution:** Signal strength will be affected if end and sides of ferrule are not thoroughly cleaned. Discard cleaning sticks after each use. Do not turn cleaning sticks back and forth pressing against connector end face. This may cause scratches if large contamination is present. Always inspect connector end face for contamination after each cleaning.



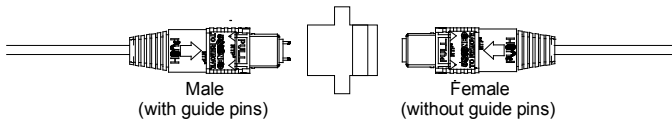
**Clean adapter** by inserting adapter cleaning stick (or fiber adapter sleeve brush) moistened with fiber optic cleaning solution (or >91% isopropyl alcohol) inside the adapter and gently pull out with twisting motion. Repeat process with a dry cleaning stick.

**Caution:** Do not try to clean adapter with a standard pipe cleaner. The sleeve inner diameter of LC adapters is too small. Do not try to clean the adapter with cleaning stick if a connector is mounted in one side. Discard cleaning sticks after each use.



### Install MPO Connectors into MPO Adapter

1. Before installing, remove the dust cap and refer to the MPO cleaning instructions.
2. Attach an MPO connector end into an MPO adapter by aligning the key on the connector body with the keyway in the adapter. Apply enough pressure till you hear a "click" sound, which signifies that the connector is plugged into the adapter.



3. If a high loss is present, remove the MPO connector, use the MPO cleaning instructions and reinstall the connector.
4. Whenever disconnecting and reconnecting the MPO connector, refer to the MPO cleaning instructions before reinstallation.

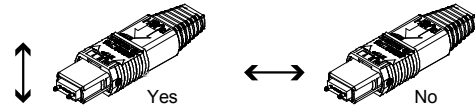
**Warning:** Do not connect male connector ends to each other. Doing so will damage the connector end face. Do not connect two female ends. If you do connect two female ends together, the test results will present a high insertion loss.



### Cleaning the MPO Connector and MPO Adapter

**Clean exposed connector ferrule** by lightly moistening lint-free wipe with fiber optic cleaning solution (or >91% isopropyl alcohol), and by applying medium pressure, first wipe against wet area and then onto dry area to clean potential residue from end face. **Clean connector ferrule** inside adapter by inserting lightly moistened cleaning stick with fiber optic cleaning solution (or >91% isopropyl alcohol) inside the adapter until contact is made with connector on opposite end. Applying medium pressure, wipe the end face in direction perpendicular to fiber array and all the way around each pin. Repeat process using dry cleaning stick.

**Caution:** Signal strength will be affected if end and sides of ferrule is not thoroughly cleaned. Discard cleaning sticks after each use. Do not turn cleaning sticks back and forth pressing against connector end face. This may cause scratches if large contamination is present. To prevent scratching the end face, always clean the MPO connectors with a cleaning motion from top to bottom. Never clean the MPO connector by rubbing across it from side to side.



**Clean adapter** by inserting adapter cleaning stick (or fiber adapter sleeve brush) moistened with fiber optic cleaning solution (or >91% isopropyl alcohol) inside the adapter and gently wiping inside surface. Repeat process with a dry cleaning stick.

**Caution:** Do not try to clean the adapter with cleaning stick if a connector is mounted in one side. Discard cleaning sticks after each use.

- For product information and support, visit us on the web at <http://www.commscope.com/SupportCenter>
- For technical assistance:
  - Within the United States, contact your local account representative or technical support at 1-800-344-0223. Outside the United States, contact your local account representative or Authorized Business Partner.
  - Within the United States, report any missing/damaged parts or any other issues to CommScope Customer Claims at 1-866-539-2795. Outside the United States, contact your local account representative or Authorized Business Partner.

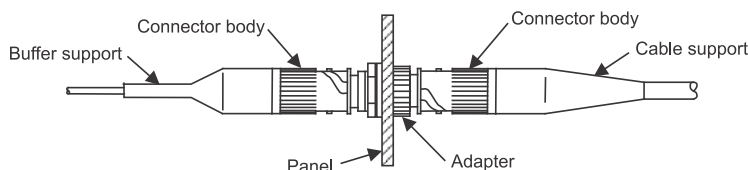
ST<sup>®</sup> and SC Connectors

For optimal connectivity performance, invest in a Fiber Optic Inspection and Cleaning Kit for your installation team.

CommScope<sup>®</sup> Cleaning and Inspection Kit – 760053199  
Consumable Replacement Kit – 760053207

Install ST<sup>®</sup> Connectors into Adapter

1. Install the connectors into the adapter by aligning the mark on the rim of the connector body with the slot in the adapter. Complete the connection by pushing the connector into the adapter with a clockwise twist-locking motion.
2. If a high-loss condition exists, use the ST cleaning procedures and reinstall the connectors as described in Step 1.
3. When doing rearrangements or reinsertions of ST connectors, use the ST cleaning procedures to clean all components and reinstall the connectors as described in Step 1.

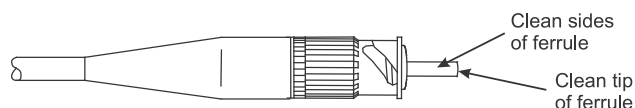


## Clean ST Connector and Adapter

**Clean exposed connector ferrule** by lightly moistening lint-free wipe with fiber optic cleaning solution (or >91% isopropyl alcohol), and by applying medium pressure, first wipe against wet area and then onto dry area to clean potential residue from end face.

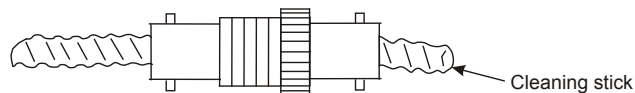
**Clean connector ferrule** inside adapter by inserting lightly moistened cleaning stick with fiber optic cleaning solution (or >91% isopropyl alcohol) inside the adapter until contact is made with connector on opposite end. Rotate cleaning stick with medium pressure in one circular motion as it is pulled away from the adapter. Repeat process using dry cleaning stick.

**Caution:** Signal strength will be affected if end and sides of ferrule are not thoroughly cleaned. Discard cleaning sticks after each use. Do not turn cleaning sticks back and forth pressing against connector end face. This may cause scratches if large contamination is present. Always inspect connector end face for contamination after each cleaning.



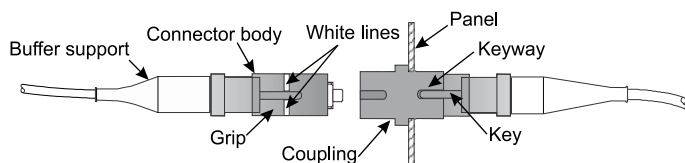
**Clean adapter** by inserting adapter cleaning stick (or fiber adapter sleeve brush) moistened with fiber optic cleaning solution (or >91% isopropyl alcohol) inside the adapter and gently pull out with twisting motion. Repeat process with a dry cleaning stick.

**Caution:** Discard cleaning sticks after each use. Do not try to clean the adapter with cleaning stick if a connector is mounted in one side.



## Install SC Connectors into Adapter

1. Install each connector into the adapter by aligning the key on the connector body with the keyway on the adapter. The connector is properly installed when the white line in the grip disappears inside the adapter.
2. If a high-loss condition exists, use the SC cleaning procedures and reinstall the connectors as described in Step 1.
3. When doing rearrangements or reinsertions of SC connectors, use the SC cleaning procedures to clean all components and reinstall the connectors as described in Step 1.

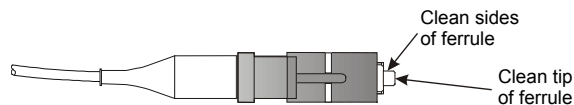


## Clean SC Connector and Adapter

**Clean exposed connector ferrule** by lightly moistening lint-free wipe with fiber optic cleaning solution (or >91% isopropyl alcohol), and by applying medium pressure, first wipe against wet area and then onto dry area to clean potential residue from end face.

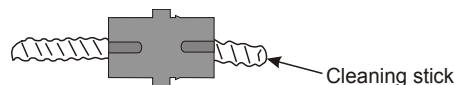
**Clean connector ferrule** inside adapter by inserting lightly moistened cleaning stick with fiber optic cleaning solution (or >91% isopropyl alcohol) inside the adapter until contact is made with connector on opposite end. Rotate cleaning stick with medium pressure in one circular motion as it is pulled away from the adapter. Repeat process using dry cleaning stick.

**Caution:** Signal strength will be affected if end and sides of ferrule are not thoroughly cleaned. Discard cleaning sticks after each use. Do not turn cleaning sticks back and forth pressing against connector end face. This may cause scratches if large contamination is present. Always inspect connector end face for contamination after each cleaning.



**Clean adapter** by inserting adapter cleaning stick (or fiber adapter sleeve brush) moistened with fiber optic cleaning solution (or >91% isopropyl alcohol) inside the adapter and gently pull out with twisting motion. Repeat process with a dry cleaning stick.

**Caution:** Discard cleaning sticks after each use. Do not try to clean the adapter with cleaning stick if a connector is mounted in one side.



# CERTIFICATE

Certificate Number: 111045.000  
Including Seven Page Addendum

The Quality Management System and implementation of:

## CommScope, Inc.

With Virtual Central Function at:  
1100 CommScope Place SE  
Hickory, NC 28602  
United States

meets the requirements of the standard:

## ISO 9001:2015

### Scope:

The sales, marketing, design, manufacture, test, repair, support, service, and distribution of telecommunications products, components, and services for the telecommunications, wireless, and broadcast networks industries

Certificate Expires: January 04, 2026  
Certificate Issued: January 05, 2023  
Certified Since: January 10, 2001

Business Segments	Exceptions
Connectivity and Cable Solutions (CCS)	None
Networking, Intelligent Cellular & Security Solutions (NICS)	None
Outdoor Wireless Networks (OWN)	None
Access Network Solutions (ANS)	None



Dr. Cem O. Onus  
Managing Director

DEKRA Certification, Inc.  
1945 The Exchange SE #300  
Atlanta, GA 30339 USA  
(215) 997-4519  
<https://www.dekra.us/en/audits/>





# CERTIFICATE ADDENDUM

Certificate Number: 111045.000  
ADDENDUM Page One of Seven

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**ISO 9001:2015**

<b>Site Activities Legend:</b>	HQ = Headquarters	MFG = Manufacturing	SER = Services (Professional Services and/or Technical Support)
	HW DE= Hardware Development	REP = Repair	SC = Purchasing, Supplier Management, Manufacturing Support, Repair Support
	SW DE= Software Development	SAL = Sales, Marketing	DIST = Distribution

<b>Site Address</b>	<b>Site Activities</b>
CommScope Inc 1100 CommScope Place SE Hickory, NC 28602 United States	HQ (Virtual)
ARRIS Technology, Inc. 3871 Lakefield Drive Suwanee, GA 30024 United States	HW & SW DE, SAL, SER, SC
ARRIS Technology, Inc. 101 Tournament Dr. Horsham, PA, 19044 United States	HW & SW DE, SAL, SER, SC
ARRIS Technology, Inc. 6450 Sequence Drive San Diego, CA 92121 United States	SW DE, SER
ARRIS Technology, Inc. 900 Chelmsford St. Lowell, MA 01851 United States	HW & SW DE, SER, SC

Certificate Expires: January 04, 2026  
Certificate Issued: January 05, 2023  
Certified Since: January 10, 2001



Dr. Cem O. Onus  
Managing Director

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# CERTIFICATE ADDENDUM

Certificate Number: 111045.000  
ADDENDUM Page Two of Seven

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**ISO 9001:2015**

Site Address	Site Activities
ARRIS Solutions, Inc. 2400 Ogden Ave., Suite 180 Lisle, IL 60532 United States	HW & SW DE, SAL, SER, SC
ARRIS 15 Sterling Drive Wallingford, CT 06492 United States	HW & SW DE, SER, SC
ARRIS Technology, Inc. 2450/2500 Walsh Avenue Santa Clara, CA 95051 United States	HW & SW DE, SAL, SER
Ruckus Wireless International Inc. 350 West Java Dr. Sunnyvale, CA 94089 United States	HW & SW DE, SER
Ruckus Wireless Network Technology (Shenzhen) Co. Ltd. Units C&D, 5th Floor, No. 2 Finance base, 8 KeFa Road, Shenzhen, China	SW DE, SC, HW DE

Certificate Expires: January 04, 2026  
Certificate Issued: January 05, 2023  
Certified Since: January 10, 2001



Dr. Cem O. Onus  
Managing Director

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# CERTIFICATE ADDENDUM

Certificate Number: 111045.000  
ADDENDUM Page Three of Seven

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**ISO 9001:2015**

Site Address	Site Activities
<b>Site Address</b>	<b>Site Activities</b>
CommScope Asia (Suzhou) Technologies Co., Ltd. 77 Qiming Road, Suzhou Industrial Park Suzhou, Jiangsu 215121 Peoples Republic of China	MFG, SC
Ruckus Wireless International Inc., Taiwan Branch @ Neihsu District, Taipei City, Rui Road 411, 10th floor, Taipei	SW DE
ARRIS Group India Pvt Limited (AGIPL) Salarpuria Supreme, Ground Floor West Wing & First Floor Munnekolalu Village, Varthur Hobli, Outer Ring Road, Bangalore-560037	SW DE
ARRIS Group de Mexico S.A. de C.V. Av. La Paz 11721 Parque Industrial Pacifico Tijuana, BC 22643 Mexico	MFG, REP, SC
ARRIS Communications Ireland Limited Building 4300, Cork Airport Business Park Kinsale Road Cork County Ireland	HW & SW DE
ARRIS Group India Private Limited "The Senate" No:33/1, Ulsoor Road, Bangalore - 560 042 India	HW & SW DE

Certificate Expires: January 04, 2026  
Certificate Issued: January 05, 2023  
Certified Since: January 10, 2001



Dr. Cem O. Onus  
Managing Director

DEKRA Certification, Inc.  
1945 The Exchange SE #300  
Atlanta, GA 30339 USA  
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# CERTIFICATE ADDENDUM

Certificate Number: 111045.000  
ADDENDUM Page Four of Seven

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**ISO 9001:2015**

Site Address	Site Activities
ARRIS Group, Inc. 50 Stranmillis Embankment Belfast, BT95FL Northern Ireland	SW DE
CommScope Czech Republic, s.r.o. Turanka 856/98B 627 00 Brno Czech Republic	HW DE,
CommScope CZ, spol. s.r.o. U Morusi 888, 53006 Pardubice Czech Republic Czech Republic	HW DE,
CommScope Connectivity UK Limited Units 1 and 4 Kinmel Park Industrial Estate Bodelwyddan, Denbighshire, LL18 5TZ United Kingdom	HW DE, MFG, SAL
CommScope Design & Integration UK Ltd. Unit 5 & 6 Eden Business Park Eden House Drive Old Malton, Malton, North Yorkshire YO17 6AE United Kingdom	HW DE, MFG, SC

Certificate Expires: January 04, 2026  
Certificate Issued: January 05, 2023  
Certified Since: January 10, 2001



Dr. Cem O. Onus  
Managing Director

DEKRA Certification, Inc.  
1945 The Exchange SE #300  
Atlanta, GA 30339 USA  
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# CERTIFICATE ADDENDUM

Certificate Number: 111045.000  
ADDENDUM Page Five of Seven

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**ISO 9001:2015**

Site Address	Site Activities
CommScope Design & Integration UK Limited 412 The Quadrant, Birchwood Park Warrington, WA3 6FW United Kingdom	SER
CommScope EMEA Ltd. Corke Abbey Avenue Bray, Co. Dublin Ireland	MFG, SAL
CommScope EMEA Ltd. Diestsesteenweg 692 3010 Kessel-Lo, Belgium	HW DE, MFG, SAL
CommScope Italy Srl Via Archimede, 22/24 Agrate Brianza (MB) 20864 Italy	HW DE, REP, SW DE
Telecom Networks Americas AV. HIPOLITO YRIGROYEN 2999, DEPOSITO 6 EL TALAR, TIGRE Buenos Aires B1618AXD Argentine Republic	SAL, DIST
CommScope Networks India Private Limited Salarpuria Softzone, A Block, 1st Floor Survey No 80/1, 81/1, 81/2, B Wing, Belandur Village, Varthur Hobli, Outer Ring Bangalore – Karnataka 560103 India	SW DE
ADC India Communications Ltd. No 10 C , 2nd Phase Peenya Industrial Area Bangalore – Karnataka 560058 India	MFG, SC

Certificate Expires: January 04, 2026  
Certificate Issued: January 05, 2023  
Certified Since: January 10, 2001



**Dr. Cem O. Onus**  
Managing Director

DEKRA Certification, Inc.  
1945 The Exchange SE #300  
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(215) 997-4519  
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# CERTIFICATE ADDENDUM

Certificate Number: 111045.000  
ADDENDUM Page Six of Seven

The Quality Management System and implementation of:

**CommScope, Inc.**

With site at:

**CommScope Asia (Suzhou) Technologies Co.,Ltd.**

77 Qiming Road, Suzhou Industrial Park

Suzhou, Jiangsu 215121

Peoples Republic of China

meets the requirements of the standard:

## ISO 9001:2015

The validity of this certificate depends on the validity of the main certificate.

### Scope:

Production of network cable, fiber cable and communication equipment component (copper patch cords, copper panel, accessories etc.)

**Certification Structure:** Multi-site

Certificate Expires:	January 04, 2026
Certificate Issued:	January 05, 2023
Certified Since:	January 10, 2001



Dr. Cem O. Onus  
Managing Director

DEKRA Certification, Inc.  
1945 The Exchange SE #300  
Atlanta, GA 30339 USA  
(215) 997-4519  
<https://www.dekra.us/en/audits/>





# 证书附录

证书编号: 111045.000

附录第7页,共7页

质量管理体系和实施:

**CommScope, Inc.**

其场所:

**康普科技 (苏州) 有限公司**

中国江苏省苏州工业园区启明路77号,邮编215121

符合以下标准要求:

## ISO 9001:2015

本证书的有效性取决于主证书的有效性。

### 范围:

网络线、光缆、通信系统设备材料 (网络跳线、配线装置等) 的生产。

认证结构: 多场所

证书有效期: 2026.01.04

发证日期: 2023.01.05

首次发证日期: 2001.1.10



Dr. Cem O. Onus  
Managing Director

DEKRA Certification, Inc.  
1945 The Exchange SE #300  
Atlanta, GA 30339 USA  
(215) 997-4519  
<https://www.dekra.us/en/audits/>



# Certificate of Registration

## ENVIRONMENTAL MANAGEMENT SYSTEM - ISO 14001:2015

This is to certify that:

CommScope, Inc. of North Carolina  
1100 CommScope Place SE  
Hickory  
North Carolina  
28603-0339  
USA


Holds Certificate No:

**EMS 648387**

and operates an Environmental Management System which complies with the requirements of ISO 14001:2015 for the following scope:

The environmental management system to control the risks associated with the manufacture, distribution, field support and central function of telecommunication products and services.

For and on behalf of BSI:

  
Carlos Pitanga, Chief Operating Officer Assurance – Americas

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 1 of 5



...making excellence a habit.™

Certificate No: **EMS 648387**

Location	Registered Activities
Andrew Telecommunications de Reynosa S. de R.L. de C.V. Av. Industrial Reynosa Lte 2 al 5 Parque Industrial Center Reynosa Tamaulipas 88780 Mexico	Manufacture and distribution of telecommunication products including antenna and cable.
CommScope Asia (Suzhou) Technologies Co., Ltd. EPZ II, 77 Qiming Road Suzhou Industrial Park Suzhou Jiangsu 215121 China	Manufacture and distribution of telecommunication products, including cable.
Andrew Telecommunications India Pvt. Ltd. Plot No. N-2, Phase IV Verna Industrial Estate Verna Salcette Goa 403 722 India	Manufacture and distribution of telecommunication products, including antenna and cable.
CommScope EMEA Ltd. Corke Abbey Avenue Bray County Dublin A98FY03 Ireland	Manufacture and distribution of telecommunication products, including cable and connectors.
CommScope Telecommunications (China) Co., Ltd. 68 West Su Hong Xi Lu Suzhou Industrial Park Suzhou Jiangsu 215021 China	Manufacture and distribution of telecommunication products, including antenna and cables.

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 2 of 5

This certificate remains the property of BSI and shall be returned immediately upon request.

An electronic certificate can be authenticated [online](http://www.bsigroup.com/ClientDirectory). Printed copies can be validated at [www.bsigroup.com/ClientDirectory](http://www.bsigroup.com/ClientDirectory). To be read in conjunction with the scope above or the attached appendix.

Information and Contact: BSI, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP. Tel: + 44 345 080 9000  
BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.  
A Member of the BSI Group of Companies.



Certificate No: **EMS 648387**

Location	Registered Activities
Andrew Wireless Systems GmbH Industriering 10 Buchdorf 86675 Germany	Manufacture and distribution of telecommunication products, including amplifiers and antenna systems.
CommScope, Inc. of North Carolina 1100 CommScope Place SE Hickory North Carolina 28603-0339 USA	Corporate headquarters responsible for management system oversight of all locations listed on this certificate.
CommScope Inc. 6519 CommScope Road Catawba North Carolina 28609-0199 USA	Manufacture and distribution of telecommunication products, including cable.
CommScope Inc. 3642 US Hwy 70 East Claremont North Carolina 28610-0879 USA	Manufacture and distribution of telecommunication products, including cable.
CommScope Czech Republic s.r.o. Turanka 98B Brno 62700 Czech Republic	Manufacture and distribution of telecommunication products, including connectors and terminations.
CommScope Inc. of North Carolina 1100 CommScope Place SE Hickory North Carolina 28603-0339 USA	Customer care, facility maintenance, and administrative functions.
ADC de Delicias, S. de R.L. de C.V. Blvd. Fernando Baeza No. 1301 Sur Delicias Chihuahua 33000 Mexico	Manufacturing and distribution of telecommunication products.

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 3 of 5

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BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.

A Member of the BSI Group of Companies.

Certificate No: **EMS 648387**

Location	Registered Activities
ADC de Juarez S. de R.L. de C.V. Parque Industrial Antonio J Bermudez Ciudad Juarez Chihuahua 32470 Mexico	Manufacturing and distribution of telecommunication products.
CommScope Connectivity Belgium bvba Diestsesteenweg 692 Kessel-lo 3010 Belgium	Manufacture and distribution of telecommunication products.
CommScope Technologies de Juarez S. de R.L. de C.V. Santiago Troncoso 331 Praderas del Sur, Ciudad Juarez Chihuahua 32575 Mexico	Manufacture of Fiber Optic Splice Closures (FOSC), Fiber Guide Systems (FGS), Hardened Connectivity and Molding-Gel Filling, including: plastic injection molding, plastic extrusion, plastic and metal machining, and assembly operations.
CommScope Connectivity UK Limited Unit 1 Kinmel Park Bodelwyddan Rhyl, Denbighshire LL18 5TZ United Kingdom	Fibre optic cable manufacturing, termination and design of other telecommunication products and services.
CommScope 11312 S. Pipeline Road Eules Texas 76040 USA	Manufacture, distribution, field support and central function of telecommunication products.
ARRIS GROUP DE MEXICO SA DE CV Av. De la Paz, #11721 Parque Industrial Pacifico Tijuana Baja California 22643 Mexico	Manufacture, repair, support, repair service, distribution of products and components for telecommunications that provide integrated solutions for voice, video and data through the processes of SMT, manual and mechanical assembly, soldering (manual, selective, printed, wave) electrical testing and packaging.

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 4 of 5

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To be read in conjunction with the scope above or the attached appendix.

Information and Contact: BSI, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP. Tel: + 44 345 080 9000

BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.

A Member of the BSI Group of Companies.

Certificate No: **EMS 648387**

Location	Registered Activities
CommScope Design & Integration UK Ltd Unit 5 & 6, Eden Business Park Edenhouse Drive Old Malton Malton YO17 6AE United Kingdom	Manufacture and distribution of telecommunications products including cabinets.
Arris Indústria Eletrônica do Brasil Ltda. CNPJ: 09.154.836/0001-15 Avenida Torquato Tapajós, 9475 Tarumã Manaus Amazonas 69041-025 Brasil	Manufacturer and distribution of Receivers, Television signal Decoders and Modulator/Router.
CommScope Design and Integration UK Ltd. Lovell House, 412 The Quadrant Birchwood Park Warrington WA3 6FW United Kingdom	Telecommunications project management, site surveys, installations commissioning and rigging.

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 5 of 5

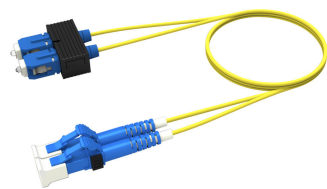
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Information and Contact: BSI, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP. Tel: + 44 345 080 9000  
BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.  
A Member of the BSI Group of Companies.

# FFWLCSC42

## Base Product



Singlemode LC/UPC to SC/UPC, Fiber Patch Cord, 1.6 mm Duplex, Low Smoke Zero Halogen (LSZH)

## Product Classification

Regional Availability	Asia   Australia/New Zealand   Europe   Latin America   Middle East /Africa   North America
Portfolio	CommScope®
Product Type	Fiber patch cord, duplex
Product Brand	SYSTIMAX InstaPATCH® 360
Product Series	FFW
Ordering Note	For lengths greater than 999 ft (304 m), orders must be in meters   Minimum length may vary based on cable configuration

## General Specifications

Connector A, quantity	2
Color, boot A	Blue
Color, connector A	Blue
Connector B, quantity	2
Color, boot B	Blue
Color, connector B	Blue
Interface, Connector A	LC/UPC
Interface, Connector B	SC/UPC
Jacket Color	Yellow
Polarity	Method B
Total Fibers, quantity	2

## Dimensions

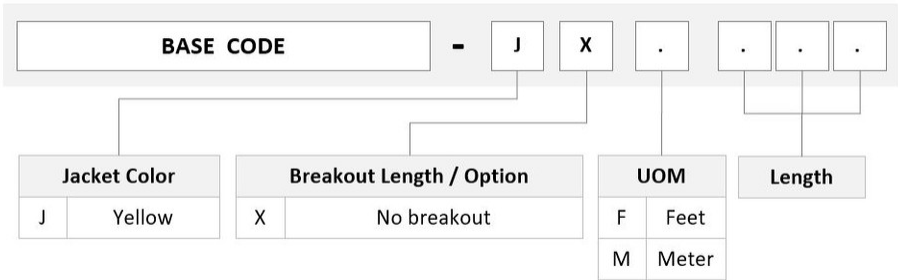
Cable Assembly Length Range (m)	1 – 999
---------------------------------	---------



# FFWLCSC42

Cable Assembly Length Range (ft)	1 – 999
Diameter Over Jacket	1.6 mm   0.063 in

## Ordering Tree



## Mechanical Specifications

Cable Retention Strength, maximum	11.24 lb @ 0 °   4.40 lb @ 90 °
-----------------------------------	---------------------------------

## Optical Specifications

Fiber Mode	Singlemode
Fiber Type	G.652.D   G.657.A1, TeraSPEED®

## Environmental Specifications

Operating Temperature	-10 °C to +60 °C (+14 °F to +140 °F)
Environmental Space	Dual Rated LSZH/Riser

## Regulatory Compliance/Certifications

Agency	Classification
ANATEL	Compliant
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on <a href="https://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a>
ROHS	Compliant
UK-ROHS	Compliant

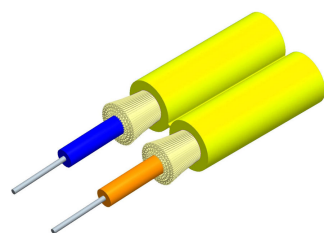


# FFWLCSC42

---

## Included Products

- |                     |   |   |
|---------------------|---|---|
| 760021675           | – | Fiber Indoor Cable, TeraSPEED® 1.6mm Low Smoke Zero Halogen Riser, 2-fiber Zipcord,         |
| N-002-ZC-8W-F16YL/E |   | Singlemode G.652.D and G.657.A1, Feet jacket marking, Yellow jacket color, Eca Flame Rating |
| 860637435           | – | LC/UPC Connector, Singlemode, Blue, Short Boot  |
| 860648965           | – | SC/UPC Connector, Singlemode, Blue  |



Fiber Indoor Cable, TeraSPEED® 1.6mm Low Smoke Zero Halogen Riser, 2-fiber Zipcord, Singlemode G.652.D and G.657.A1, Feet jacket marking, Yellow jacket color, Eca Flame Rating

Product Classification

Regional Availability	Asia   Australia/New Zealand   EMEA   Latin America   North America
Portfolio	CommScope®
Product Type	Fiber indoor cable
Product Series	N-ZC

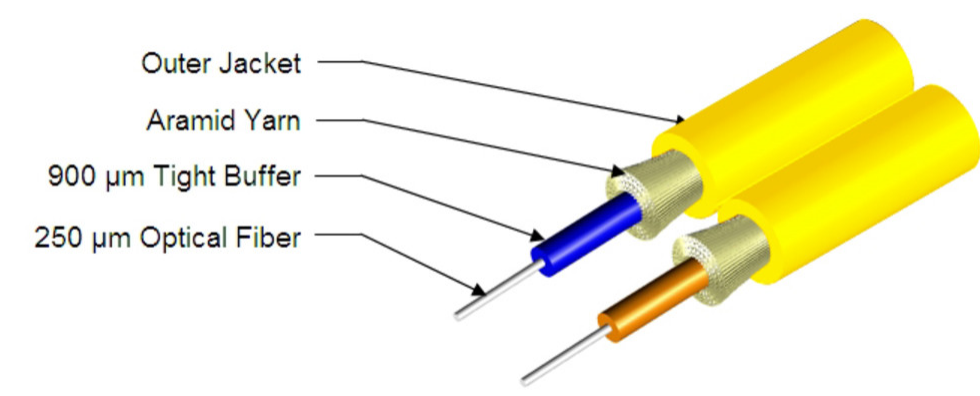
General Specifications

Cable Type	Cordage
Construction Type	Non-armored
Subunit Type	Gel-free
Jacket Color	Yellow
Jacket Marking	Feet
Total Fiber Count	2

Dimensions

Height Over Jacket	1.7 mm   0.067 in
Width Over Jacket	3.5 mm   0.138 in

Representative Image



## Mechanical Specifications

Minimum Bend Radius, loaded	38 mm   1.496 in
Minimum Bend Radius, unloaded	15 mm   0.591 in
Tensile Load, long term, maximum	53 N   11.915 lbf
Tensile Load, short term, maximum	178 N   40.016 lbf
Compression	10 N/mm   57.101 lb/in
Compression Test Method	FOTP-41   IEC 60794-1 E3
Flex	300 cycles
Flex Test Method	FOTP-104   IEC 60794-1 E6
Impact	0.74 N-m   6.55 in lb
Impact Test Method	FOTP-25   IEC 60794-1 E4
Strain	See long and short term tensile loads
Strain Test Method	FOTP-33   IEC 60794-1 E1
Twist	10 cycles
Twist Test Method	FOTP-85   IEC 60794-1 E7
Vertical Rise, maximum	500 m   1,640.42 ft

## Optical Specifications

Fiber Type	G.652.D and G.657.A1, TeraSPEED®
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## Environmental Specifications

Installation temperature	-20 °C to +60 °C (-4 °F to +140 °F)
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Operating Temperature	-20 °C to +70 °C (-4 °F to +158 °F)
Storage Temperature	-40 °C to +70 °C (-40 °F to +158 °F)
Cable Qualification Standards	ANSI/ICEA S-83-596   Telcordia GR-409
EN50575 CPR Cable EuroClass Fire Performance	Eca
Environmental Space	Low Smoke Zero Halogen (LSZH)   Riser
Flame Test Listing	NEC OFNR-ST1 (ETL) and c(ETL)
Flame Test Method	IEC 60332-1-2   IEC 60332-3   IEC 60754-2   IEC 61034-2   UL 1666   UL 1685

## Environmental Test Specifications

Heat Age	-20 °C to +85 °C (-4 °F to +185 °F)
Heat Age Test Method	IEC 60794-1 F9
Low High Bend	-20 °C to +70 °C (-4 °F to +158 °F)
Low High Bend Test Method	FOTP-37   IEC 60794-1 E11
Temperature Cycle	-20 °C to +70 °C (-4 °F to +158 °F)
Temperature Cycle Test Method	FOTP-3   IEC 60794-1 F1

## Packaging and Weights

Cable weight	6 kg/km   4.032 lb/kft
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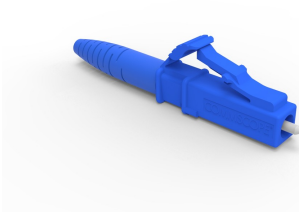
## Regulatory Compliance/Certifications

Agency	Classification
CENELEC	EN 50575 compliant, Declaration of Performance (DoP) available
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on <a href="https://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a>
ROHS	Compliant
UK-ROHS	Compliant



### \* Footnotes

Operating Temperature	Specification applicable to non-terminated bulk fiber cable
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LC/UPC Connector, Singlemode, Blue, Short Boot

Product Classification

Regional Availability	Asia   Australia/New Zealand   EMEA   Latin America   North America
Portfolio	CommScope®
Product Type	Fiber connector

General Specifications

Color, boot	Blue
Color, housing	Blue
Interface	LC/UPC

Dimensions

Length	41.6 mm   1.638 in
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Material Specifications

Ferrule Material	Zirconia
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Mechanical Specifications

Cable Retention Strength, maximum	11.24 lb @ 0 °
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Optical Specifications

Fiber Mode	Singlemode
Insertion Loss Change, mating	0.2 dB
Optical Components Standard	ANSI/TIA-568. 3-D   IEC 61753-1
Insertion Loss Change, temperature	0.3 dB
Insertion Loss, maximum	0.25 dB
Return Loss, minimum	55 dB

Regulatory Compliance/Certifications

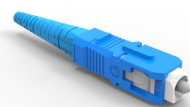
Agency	Classification
CHINA-ROHS	Below maximum concentration value
ROHS	Compliant
UK-ROHS	Compliant



\* Footnotes

Insertion Loss Change, mating	TIA-568: Maximum insertion loss change after 500 matings
Insertion Loss Change, temperature	Maximum insertion loss change from -10 °C to +60 °C (+14 °F to +140 °F)

SC/UPC Connector, Singlemode, Blue



Product Classification

Regional Availability	Asia   Australia/New Zealand   EMEA   Latin America   North America
Portfolio	CommScope®
Product Type	Fiber connector

General Specifications

Color, boot	Blue
Color, housing	Blue
Interface	SC/UPC

Dimensions

Length	48 mm   1.89 in
Compatible Cable Diameter	1.6 mm   0.063 in   2 mm   0.079 in

Material Specifications

Ferrule Material	Zirconia
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Mechanical Specifications

Cable Retention Strength, maximum	15.73 lb @ 0 °
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Optical Specifications

Fiber Mode	Singlemode
Insertion Loss Change, mating	0.2 dB
Optical Components Standard	ANSI/TIA-568. 3-D   IEC 61753-1
Insertion Loss Change, temperature	0.2 dB
Insertion Loss, maximum	0.34 dB
Return Loss, minimum	50 dB



Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Above maximum concentration value
ROHS	Compliant/Exempted
UK-ROHS	Compliant/Exempted



\* Footnotes

<b>Insertion Loss Change, mating</b>	TIA-568: Maximum insertion loss change after 500 matings
<b>Insertion Loss Change, temperature</b>	Maximum insertion loss change from -10 °C to +60 °C (+14 °F to +140 °F)

## LIMITED WARRANTY



1. **Definitions.** For purposes of this Warranty, (i) "Buyer" shall mean the individual or entity identified on the applicable purchase order or supply agreement (or, if different, on Seller's quotation, order acknowledgement or statement of work ), (ii) "Seller" shall mean the CommScope entity identified on such entity's quotation, order acknowledgement, statement of work or supply agreement, (iii) "Hardware" means equipment designed and manufactured by or on behalf of Seller, or any third-party manufacturer's equipment offered for sale by Seller to Buyer, (iv) "Product" shall mean a product manufactured by or on behalf of Seller pursuant to the applicable supply agreement, quotation or order acknowledgement, and includes any combination of Hardware and Software, (v) "Services" means site engineering, system integration, product installation, implementation, training, maintenance and technical support services for Products, or other professional services provided by Seller to Buyer. Services exclude managed services and hosted cloud services provided by Seller, (vi) "Software" means Seller-licensed software, either embedded or standalone, including any updates provided, and any other enhancements, modifications, and bug fixes provided thereto, in object code form only (unless otherwise specified), and any full or partial copies thereof. Software does not include software created or owned by third parties, including but not limited to MediaKind Software, Google's Android Software or any third party application software, and (vii) "Warranty Period" means, unless a different time period is set forth in **Exhibit A**, (a) for Hardware, one year from date of original shipment from Seller's facility, (b) for Software-only Products, ninety (90) days from the date such Software is first made available to Buyer, or for Software embedded in a Hardware Product, ninety (90) days from date of original shipment of the Product from Seller's facility, and (c) for Services, thirty (30) days from the date the performance of such Services has been rendered.

2. **Limited Warranty.** Seller warrants that, as of the date of delivery, Seller has good title to the Product, free from any lawful security interest or other lien or encumbrance unknown to Buyer. In addition, during the Warranty Period, the Product and Services will be free from defects in materials or workmanship arising under proper and normal use. This Warranty shall apply only to the Products and Services and shall not apply to any other goods or materials, parts or components of a system or any system as a whole. This Warranty does not cover ordinary wear and tear. Seller does not warrant (i) Products not purchased from Seller or its authorized resellers; (ii) that the operation of the Product will be uninterrupted or error-free; (iii) that the Product will operate in combination with other third-party products selected by Buyer; or (iv) any products manufactured by third parties; provided that Seller will, to the extent permitted by the manufacturer, assign third-party warranties to Buyer. Seller gives no warranty for, and shall have no liability with respect to, any defects arising from any software (other than the Software), including, but not limited to MediaKind Software, Android Software or any third-party application software, downloaded to or otherwise used in conjunction with the Product. Seller further warrants to Buyer that during the Warranty Period, all Services performed by Seller for Buyer will be provided in a workmanlike manner.

3. **Disclaimers.** EXCEPT AS EXPRESSLY SET FORTH IN THIS LIMITED WARRANTY OR IN A SEPARATE, APPLICABLE SOFTWARE LICENSE AGREEMENT, ALL SOFTWARE IS LICENSED ON AN "AS IS" BASIS WITHOUT WARRANTY.

4. **Inspection and Return Authorization.** Buyer must promptly notify Seller of any claimed defect in the Product and/or Services. If Buyer claims that a Product is defective in materials or workmanship, Seller shall have the right to either examine the Product where it is located or, in its sole discretion, issue shipping instructions for return of the Product. Seller's inspection in response to a warranty claim shall not constitute acceptance or acknowledgment of the claim's validity. Except as otherwise agreed to in writing, Products may not be returned to Seller without prior authorization. Buyer must contact Seller to obtain an authorization number and return the Products to the location designated by Seller. Any Products returned to Seller without proper authorization will be returned to Buyer at Buyer's expense. Risk of loss, damage and insurance responsibilities for the Products shall not pass from Buyer to Seller until delivery of the Products to Seller's designated location. Buyer shall prepay all transportation charges for such return.

5. **Remedies.** Seller's sole and exclusive obligation and Buyer's exclusive remedy under this Warranty is Seller's repair or replacement of the defective Product or re-performance of Services or issuance of a credit for the net book value of the purchase price of the defective Product. Seller shall have sole discretion as to which of these remedies Seller will provide. Seller is not liable for any repair or maintenance costs incurred by Buyer, unless Seller authorizes such charges in writing in advance of the commencement of the work. If Seller elects to replace or repair the defective Product, the replaced or repaired Product will be warranted for the remainder of the Warranty Period applicable to the originally shipped Product, but the Warranty shall not be extended beyond the original Warranty Period. Replacement Products may be new, refurbished or contain refurbished materials.

6. **Notice and Waiver.** If Buyer discovers any defect in the Product, Buyer must provide prompt (and in no case later than thirty (30) days after discovery) written notice to Seller of the claimed defect. Such notice shall describe, in reasonable detail, the symptoms of such defect. The notice must be received by Seller during the Warranty Period for such Product. Failure to give timely notice of a claim shall result in Buyer's waiver of such claim.

7. **Transfer of Ownership.** This Warranty is not transferable unless Buyer is expressly authorized by Seller in writing to resell the Product. In addition, Buyer must notify Seller on or before the fifteenth (15<sup>th</sup>) day after the date on which it transfers ownership of the warranted Product. Any transfers in violation of this Section shall invalidate this Warranty. Notice of the transfer of ownership must be in writing and shall include the name and address of the new owner.

8. **Exclusions from Warranty.** This Warranty shall not apply to problems attributable to, or as a result of:

- (a) improper installation or misapplication of parts;
- (b) chain or system failures induced by other products or components;
- (c) lack of proper inspection or maintenance or failure to provide a suitable operating environment;
- (d) any consumables provided with the Product, including but not limited to batteries and other accessories, and any other materials, components or products manufactured by a third party;
- (e) power surges, fire, unusual mechanical, physical or electrical stress, severe weather conditions or acts of nature, including but not limited to, lightning or floods;
- (f) usage or operation not in accordance with published ratings, specifications or instructions, including but not limited to environmental specifications identified by Seller;
- (g) any adjustment, modification, alteration, removal or repair of any part of the Product, including but not limited to removal or alteration of serial numbers or other identifying marks not expressly authorized by Seller in writing;
- (h) accidental damage, misuse, abuse, neglect or unauthorized access of the Product or of any system of which the warranted Product is a part;
- (i) any type of aesthetic changes due to oxidation or corrosion occurring on stainless steel or galvanized steel parts installed in unusually corrosive marine and industrial atmospheres (in which case Seller's only obligation shall be to ensure that Product complies with Seller's published material specifications);
- (j) use of the Product for purposes other than that for which it was designed; or
- (k) mishandling during shipment of the Product.

## LIMITED WARRANTY

This Warranty is for Products installed and used in accordance with Seller's design, installation and operating parameters. Buyer's failure to ensure conformity with such parameters will void all warranties. Under no circumstance shall Seller have any liability or obligation with respect to expenses, liabilities or losses associated with the installation or removal of any Product or the installation or removal of any components for inspection, testing or redesign occasioned by any defect or by any repair or replacement of a Product.

9. **Limitation on Liability.** THE WARRANTIES SET FORTH IN SECTION 2 HEREOF ARE EXCLUSIVE AND ARE MADE ONLY TO BUYER. SELLER MAKES NO OTHER REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, AND SPECIFICALLY DISCLAIMS AND EXCLUDES ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY, NONINFRINGEMENT OR FITNESS FOR A PARTICULAR PURPOSE AND ANY REPRESENTATION OR WARRANTY ARISING BY USAGE OF TRADE, COURSE OF DEALING OR COURSE OF PERFORMANCE. No person is authorized to give any additional warranties on Seller's behalf or to assume for Seller any other liability, except in a writing signed by an authorized officer of Seller. SELLER'S TOTAL LIABILITY FOR ANY CLAIM OR DAMAGE ARISING OUT OF AND/OR IN CONNECTION WITH THE MANUFACTURE, SALE, DELIVERY OR USE OF THE PRODUCTS OR SERVICES WILL BE LIMITED TO PROVEN DIRECT DAMAGES, NOT TO EXCEED (I) FOR PRODUCTS, THE DEPRECIATED VALUE OF THE PURCHASE PRICE OF SUCH PRODUCTS OR (II) FOR SERVICES, THE ACTUAL AMOUNT PAID TO SELLER FOR SERVICES DURING THE 12 MONTH PERIOD IMMEDIATELY PRIOR TO THE EVENT (OR SERIES OF EVENTS) GIVING RISE TO THE LIABILITY. IN NO EVENT WILL SELLER BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL OR PUNITIVE DAMAGES, INCLUDING, WITHOUT LIMITATION, ANY CLAIM FOR LOSS OF ACTUAL OR ANTICIPATED DATA, USE, REVENUES OR PROFITS. The Products are not specifically designed, tested, manufactured or intended for operation or use in any inherently dangerous, life endangering or life support applications where any failure of the Products could lead to death, personal injury or significant physical or environmental damage (High Risk Activities). If Buyer uses the Products in High Risk Activities, including but not limited to nuclear facilities or the flight, navigation or communication of aircraft, Buyer agrees that neither Seller nor its third party licensors are liable in whole or in part, for any claims or damages arising from such use, and that Buyer shall indemnify and hold Seller and its third party licensors harmless from any and all claims for loss, cost, damage, expense or liability arising out of or in connection with any use of the Products in High Risk Activities. These limitations on liability will apply regardless of the form of action, whether in contract, tort, strict liability or otherwise, and whether damages were foreseeable and will survive failure of any exclusive remedies provided in Section 4 hereof.

10. **Choice of Law.** The terms and conditions contained herein and the rights of the parties to any transaction to which they relate shall be governed by and construed in accordance with the laws of the State of North Carolina, U.S.A. The United Nations Convention on Contracts for the International Sale of Goods shall not apply.

## LIMITED WARRANTY

### Exhibit A

Product Categories	Warranty Period from Original Shipment Date*
<b>Category A Products</b> E6000® Converged Edge Router (CER); E6000n™ Remote PHY Devices (RPDs); E6000r™ Remote PHY Shelves; E6000n™ Remote MACPHY Devices (RMDs); vManager; Remote OLT (R-OLT); associated power supplies and accessories. FLX PON OLT portfolio including vOLT. CherryPicker products, Encoder products including ME-7000, SE-6000; DSR-4xxx, DSR-6xxx and DSR-7xxx series IRD products, and Uplink systems including TME-2020, VDP-1000, BNC, DEM, and SEM; All APEX Universal EQAM including APEX1000 and APEX3000; All Aloha interactive products including OM2000, ARPD, ADM4000 and NC1500 4.0. All SDM products. All VUE and VTM Software Products. All STDC products.	Hardware One (1) Year Software Ninety (90) Days
<b>Category B Products</b> All High and Standard Definition Transport Adapter MS4000™ Media Streamer	Hardware One (1) Year Software Ninety (90) days ** For certain CPE, option for 1% overship in lieu of Hardware warranty is standard
<b>Category C Products</b> Intentionally left blank.	
<b>Category D Products</b> All Third Party OEM Products: power meters; All VUE and VTM hardware platforms; NC1500 4.0 hardware platform; LQA256 Legacy QAM Adapter; Elemental Products including Live, Server, Delta, Conductor and StatMux; DC2180 Cabinet Node, Cooling Systems	Pass Through from OEM: Hardware One (1) Year Software Ninety (90) Days
<b>Category E Products</b> Intentionally left blank	
<b>Category F Products</b> All OM and SG optical node platforms, Flex Max® and Starline® amplifier platforms, RF Taps & Passives, and Optical Passives	Hardware Five (5) Years within the United States and Canada Hardware Three (3) Years outside United States and Canada Software Ninety (90) Days
<b>Category F1 Products</b> All CHP Headend Optical (HEO) Elements	Hardware Three (3) Years Software Ninety (90) Days
<b>Category G1 Products</b> All NC optical node platforms and Optical Passives, including OP/NP/DP/DC models.	Hardware Five (5) Years Software Ninety (90) Days
<b>Category G2 Products</b> All CH3 Headend (HEO) Elements	One (1) year
<b>Category G3 Products</b> All EPON and GPON ONUs, RFoG/HPON R-ONUs, including, CP8 models and associated power supplies and accessories	Hardware Three (3) Years Software Ninety (90) Days



## LIMITED WARRANTY

<b>Category H Products</b> All ConvergeMedia™ Distribution Platforms and Management Suite, AdManager™ including SkyVision Ad Management and EMP solutions CVEx™, SVA, all Vertasent products including SVOM, SVM and ERM, AdEdge™ COM and AdEdge APS,VMS, Manifest Delivery Controller (MDC), ARRIS Video Content Manager (AVCM) and Next Generation Insertion (NGI) and Multicast ABR.	Hardware One (1) Year Software Ninety (90) Days
<b>Category I Products</b> ServAssure® Advanced, ServAssure® NXT - Alarm Central, ServAssure® NXT - Analyze, ServAssure Domain Manager and EventAssure™. WorkAssure™® Workforce Management, Mobile TV, SecureMedia and Titanium	Hardware One (1) Year Software Ninety (90) Days
<b>Category J Products</b> Intentionally left blank	
<b>Category K Products</b> Intentionally left blank.	
<b>Category L Products</b> Intentionally left blank	
<b>Category M Products</b> Intentionally left blank.	
<b>Category N Products</b> Intentionally left blank.	
<b>Category O Products</b> All CAS Products including DAC, CASMR (and associated plug-ins), CAST, Advisor, CSS, OLL, CSS-Lite, KLS, DKS, CPMS	DAC, CASMR, CAST, Advisor, CSS Hardware Three (3) Years OLL, CSS-Lite, KLS, DKS, OLES, CPMS Hardware One (1) Year Software Ninety (90) Days
<b>Category P Products</b> Intentionally left blank.	
<b>Category P1 Products</b> Intentionally left blank	
<b>Category Q Products</b> Intentionally left blank	
<b>Category R Products</b> Intentionally left blank	
<b>Category R1 Products</b> Intentionally left blank	
<b>Category S Products</b> Intentionally left blank	
<b>Category S1 Products</b> Intentionally left blank	

## LIMITED WARRANTY

<p><b>Category T Products</b> RUCKUS Wi-Fi</p>	<p>Hardware:</p> <ul style="list-style-type: none"> <li>- Indoor Access Points and Wall Plate Access Points – Limited Lifetime Warranty,** except for access points with an “e” suffix (e.g., R350e), for which the HW warranty period is one (1) year.</li> <li>- Outdoor Access Points – One (1) Year</li> <li>- Controllers – One (1) Year, except ZoneDirector controllers are covered by the Limited Lifetime Warranty**</li> </ul> <p>Software Ninety (90) Days</p>
<p><b>Category T1 Products</b> RUCKUS ICX Switches</p>	<ul style="list-style-type: none"> <li>- ICX Switches (including switch modules, PSUs, and Fans, but excluding removable optics/transceivers and LEDs) – Limited Lifetime Warranty,** except for ICX 7150- C08PT, for which the HW warranty period is 13 months.</li> <li>- LEDs – 12 months</li> <li>- Removable Optics/Transceivers – 60 months (13 months if shipped from Seller prior to June 1, 2021)</li> </ul> <p>Software: Limited lifetime access to defect repairs, and software maintenance updates through end of support date of product</p>
<p><b>Category T2 Products</b> Intentionally left blank</p>	
<p><b>Category U Products</b></p> <p>Other OSP Cable Products (P3®, Drop Coax, Fiber Cable, Fiber Drop Cable, CIC)</p> <p>NovuX Products</p> <p>Prodigy</p> <p>Products FDH</p> <p>Products</p> <p>Multiservice terminals (MST), Open Terminals (OTE) and Hardened Drop Cable</p> <p>Assemblies OSP “Box” Products</p> <p>Mini-RDTs and RDTs</p> <p>FOSC™, FIST™ and</p> <p>Tenio™</p> <p>OSP Copper Connect and Closure Products</p> <p>HELIAX® FiberFeed® Products, including FiberFeed® hybrid and fiber cables and assemblies, power cables and junction boxes</p> <p>Fiber Optic Panels, including Accessories, Mounting Hardware, Modules</p> <p>Fiber Optic Field Terminated Connectors, Kits, Tools, Consumables,</p> <p>Accessories Indoor Fiber Cable, Patch Cords, Cable Assemblies, Fiber Trunks</p> <p>Passive Optical Components and Value Added Modules (VAMs)</p> <p>FiberGuide® : Fiber cable Management System</p> <p>Optical Distribution Frames, including Modules, Blocks, Accessories and</p> <p>Hardware Cabinets Cable and Apparatus Products</p> <p>Alifabs™ Cabinets &amp; Ancillary Products</p> <p>Alifabs™ Telecommunications Towers and Accessories</p> <p>Metro Cell Products, including Enclosures; Integrated Pole; Standard Poles; Accessories; and Wood Pole Brackets</p>	<p>One (1) year</p>

## LIMITED WARRANTY

<b>Category V Products</b> ValuDAS® Passive Products, including Air Directional Couplers, Hybrid Couplers, High Power Splitters, and Cell-Max™ Antennas Standard Tower Mounted Amplifier, Bias Tee and Power Distribution Unit Products Standard Filter & Combiner Products  Electronic Enclosure Products (Cabinets)  Alifabs™ Free Cooling Products and Accessories and Spare Parts, including  Monitor All-In-One FLX (Active Passive Cabines)  PowerShift™ & Power Products	Two (2) years
<b>Category W Products</b> ValuSite® Products  I-Line Accessory Products  Microwave Antennas  Terrestrial Microwave System Products (including Microwave System Flex-Twist, Coupler, Filter and Diplexer Products)	Three (3) years
<b>Category X Products</b> Broadband RF Connectivity Products   Premium Passive Products, including In-Building Directional Couplers, Hybrid Matrices, Tappers, Power Splitters, Terminations, Attenuators and CMAX Antenna Products	Five (5) years
<b>Category Y Products</b> QR® Coaxial Cable	Five (5) years
<b>Category Z Products</b> Standard RADIAX® Cable, Connector, Accessory and Cable Assembly* Products  * RADIAX® Cable Assembly Product means any RADIAX® coaxial cable that has been fitted with Seller's connectors in accordance with the installation instructions.	One (1) year
<b>Category AA Products</b> Standard CNT® Cable, Connector, Accessory and Cable Assembly* Products  * CNT® Cable Assembly Product means any CNT® coaxial cable that has been fitted with Seller's connectors by Seller or its certified distributor	Five (5) years; except that the Warranty Period for Products purchased for resale purposes shall be one (1) year.
<b>Category BB Products</b> Standard HELIAX® Cable, Connector, Accessory and Cable Assembly* Products  * HELIAX® Cable Assembly Product means any HELIAX® coaxial cable or elliptical waveguide that has been fitted with Seller's connectors by Seller or its certified distributor.	Ten (10) years; except for the following: (i) three (3) years for weatherproofing kits (including SureGuard boots); (ii) one (1) year for cable preparation tools (excluding blades); (iii) one year for single click-on hanger kits; and (iv) two (2) years for surge arrestors.
<b>Category CC Products</b> Standard ERA/ION-E®, ION-M®, ION-U®, MR, CMR, i-POI®, e-POI™, and Node Repeater Products	Hardware, the earlier of: (i) one (1) year from the date of installation; or (ii) fifteen (15) months from the date of shipment. Software Ninety (90) Days
<b>Category DD Products</b> In- Building and Fixed Subscriber Antennas	The earlier of: (i) three (3) years from the date of installation or (ii) thirty-nine (39) months from the date of original shipment

## LIMITED WARRANTY

<b>Category EE Products</b> OneCell®  Powered Fiber Cable Solution: Hybrid Copper and Fiber Cables, Class 2 Power Supplies, Indoor/Outdoor POE Extenders, Field Terminated Outlets, Consolidation Boxes and Related Passive Components	Hardware, the earlier of: (i) one (1) year from the date of installation; or (ii) fifteen (15) months from the date of original shipment Software Ninety (90) Days
<b>Category FF Products</b> Small Cell Device Management System (DMS) Software DAS Device Management System (AIMOS) Software	Ninety (90) days
<b>Category GG Products</b> Base Station Antenna, Small Cell Antenna & Mosaic™ Products	Two (2) years for all base station antennas except base station antennas incorporating N-type connectors, which shall have a warranty of one (1) year
<b>Category HH Products</b> DryLine® Dehydrator Systems and Line Monitoring Systems	Three (3) years or 3,000 hours of actual run time, whichever occurs first; except the Warranty Period for the compressor is only one (1) year or 1,000 hours of actual run time, whichever occurs first.
<b>Category II Products</b> SiteRise™ Solutions	One (1) year on workmanship for the Solution.
<b>Category JJ Products</b> Copper Structured Cabling Products  Other Enterprise Products (Coax, Automotive Cables, Enterprise Enclosures and miscellaneous items) (excluding software)	One (1) year from the date of Installation
<b>Category KK Products</b> Alifabs™ Services (power upgrades, enablements, installation and decommission work, rigging, and fault management)	One (1) year from the date of completion of the work.
<b>Category LL Products</b> imVision Overlays and Controllers	Three (3) years

*\* For Category H and Category I Products only, if Seller is engaged by Buyer to provide Services for the implementation of the purchased Products, warranty period for such Products shall commence upon Buyer's acceptance of the Products and Services.*

*\*\* For Category T Products only, "Limited Lifetime Warranty" means the period beginning on the Product shipment date and continuing for as long as the original end user of the Product continues to own and use the Product. For Category T1 Products only, "Limited Lifetime Warranty" means the period beginning on the Product shipment date and continuing (i) for as long as the original end user of the Product continues to own and use the Product or (ii) through the End of Support date, as defined in the RUCKUS End of Life Policy, whichever is earlier.*



## RoHS Certificate of Compliance



Product Name: JUMPER,LSZH,TS,1.6MM,DPLX,LC-STD/SC-STD

Product Number: FFWLCSC42

Company Name: CommScope  
3642 E US Highway 70  
Claremont, NC 28610 USA

Contact: ProductCompliance@Commscope.com

Generated on: May 06, 2024

Certified by: 

Vinatha Viswanathan, Director Product Compliance

## Disclaimer

This information is provided based on reasonable inquiry of our suppliers and represents our current actual knowledge based on the information they provided and our analysis and assessment of the risks. This information is subject to change and if a change occurs which affects compliance, then this Statement will be updated. Compliance to EU ROHS 2011/65 amended by EU RoHS 2015/863 means the part numbers have a maximum concentration of no more than 0.1% by weight in homogenous materials for lead, hexavalent chromium, mercury, PBB, PBDE, and 0.01% for cadmium, or qualify for an exemption to these limits as defined in the Annexes of Directive 2011/65/EU (RoHS2). These parts also have a maximum concentration of no more than 0.1% by weight in homogenous materials for DEHP, BBP, DBP and DIBP (substances that are restricted starting from July 22, 2019). Finished electrical and electronic products will be CE marked as required by Directive 2011/65/EU. Components may not be CE marked.

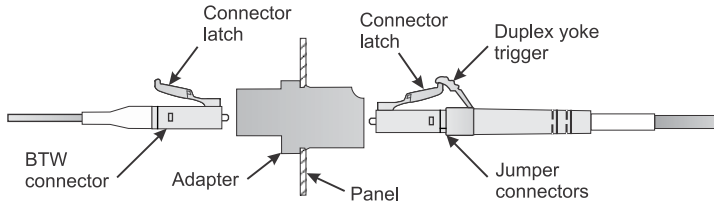
Compliance Status	Regulation	Revision	RoHS exemptions if any
Compliant	ROHS	EU RoHS - 2011/65/EU	

**For optimal connectivity performance, invest in a Fiber Optic Inspection and Cleaning Kit for your installation team.**

CommScope® Cleaning and Inspection Kit – 760053199 -- Consumable Replacement Kit – 760053207

### Install LC Connectors into Adapter

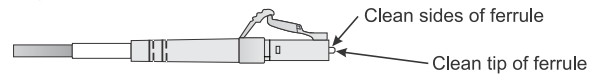
1. Install connectors into the adapter by aligning the latch on the connector with the slot on the adapter and gently push into place. An audible click is heard when the connector snaps into the adapter.
2. If a high-loss condition exists, use the LC cleaning procedures and reinstall the connector as described in Step 1.
3. When doing rearrangements or reinsertions of LC connectors, use the LC cleaning procedures to clean all components and reinstall the connectors as described in Step 1.



### Clean LC Connector and Adapter

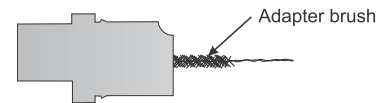
**Clean exposed connector ferrule** by lightly moistening lint-free wipe with fiber optic cleaning solution (or >91% isopropyl alcohol), and by applying medium pressure, first wipe against wet area and then onto dry area to clean potential residue from end face. **Clean connector ferrule** inside adapter by inserting lightly moistened cleaning stick with fiber optic cleaning solution (or >91% isopropyl alcohol) inside the adapter until contact is made with connector on opposite end. Rotate cleaning stick with medium pressure in one circular motion as it is pulled away from the adapter. Repeat process using dry cleaning stick.

**Caution:** Signal strength will be affected if end and sides of ferrule are not thoroughly cleaned. Discard cleaning sticks after each use. Do not turn cleaning sticks back and forth pressing against connector end face. This may cause scratches if large contamination is present. Always inspect connector end face for contamination after each cleaning.



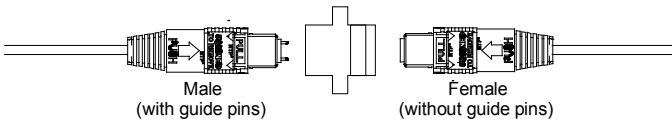
**Clean adapter** by inserting adapter cleaning stick (or fiber adapter sleeve brush) moistened with fiber optic cleaning solution (or >91% isopropyl alcohol) inside the adapter and gently pull out with twisting motion. Repeat process with a dry cleaning stick.

**Caution:** Do not try to clean adapter with a standard pipe cleaner. The sleeve inner diameter of LC adapters is too small. Do not try to clean the adapter with cleaning stick if a connector is mounted in one side. Discard cleaning sticks after each use.



### Install MPO Connectors into MPO Adapter

1. Before installing, remove the dust cap and refer to the MPO cleaning instructions.
2. Attach an MPO connector end into an MPO adapter by aligning the key on the connector body with the keyway in the adapter. Apply enough pressure till you hear a "click" sound, which signifies that the connector is plugged into the adapter.



3. If a high loss is present, remove the MPO connector, use the MPO cleaning instructions and reinstall the connector.
4. Whenever disconnecting and reconnecting the MPO connector, refer to the MPO cleaning instructions before reinstallation.

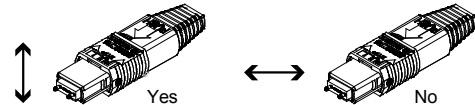
**Warning:** Do not connect male connector ends to each other. Doing so will damage the connector end face. Do not connect two female ends. If you do connect two female ends together, the test results will present a high insertion loss.



### Cleaning the MPO Connector and MPO Adapter

**Clean exposed connector ferrule** by lightly moistening lint-free wipe with fiber optic cleaning solution (or >91% isopropyl alcohol), and by applying medium pressure, first wipe against wet area and then onto dry area to clean potential residue from end face. **Clean connector ferrule** inside adapter by inserting lightly moistened cleaning stick with fiber optic cleaning solution (or >91% isopropyl alcohol) inside the adapter until contact is made with connector on opposite end. Applying medium pressure, wipe the end face in direction perpendicular to fiber array and all the way around each pin. Repeat process using dry cleaning stick.

**Caution:** Signal strength will be affected if end and sides of ferrule is not thoroughly cleaned. Discard cleaning sticks after each use. Do not turn cleaning sticks back and forth pressing against connector end face. This may cause scratches if large contamination is present. To prevent scratching the end face, always clean the MPO connectors with a cleaning motion from top to bottom. Never clean the MPO connector by rubbing across it from side to side.



**Clean adapter** by inserting adapter cleaning stick (or fiber adapter sleeve brush) moistened with fiber optic cleaning solution (or >91% isopropyl alcohol) inside the adapter and gently wiping inside surface. Repeat process with a dry cleaning stick.

**Caution:** Do not try to clean the adapter with cleaning stick if a connector is mounted in one side. Discard cleaning sticks after each use.

- For product information and support, visit us on the web at <http://www.commscope.com/SupportCenter>
- For technical assistance:
  - Within the United States, contact your local account representative or technical support at 1-800-344-0223. Outside the United States, contact your local account representative or Authorized Business Partner.
  - Within the United States, report any missing/damaged parts or any other issues to CommScope Customer Claims at 1-866-539-2795. Outside the United States, contact your local account representative or Authorized Business Partner.

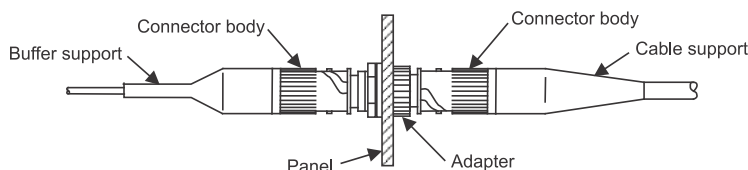
ST<sup>®</sup> and SC Connectors

For optimal connectivity performance, invest in a Fiber Optic Inspection and Cleaning Kit for your installation team.

CommScope<sup>®</sup> Cleaning and Inspection Kit – 760053199  
Consumable Replacement Kit – 760053207

Install ST<sup>®</sup> Connectors into Adapter

1. Install the connectors into the adapter by aligning the mark on the rim of the connector body with the slot in the adapter. Complete the connection by pushing the connector into the adapter with a clockwise twist-locking motion.
2. If a high-loss condition exists, use the ST cleaning procedures and reinstall the connectors as described in Step 1.
3. When doing rearrangements or reinsertions of ST connectors, use the ST cleaning procedures to clean all components and reinstall the connectors as described in Step 1.

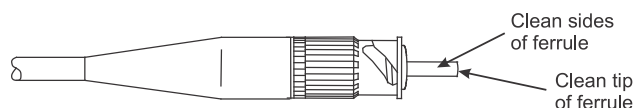


## Clean ST Connector and Adapter

**Clean exposed connector ferrule** by lightly moistening lint-free wipe with fiber optic cleaning solution (or >91% isopropyl alcohol), and by applying medium pressure, first wipe against wet area and then onto dry area to clean potential residue from end face.

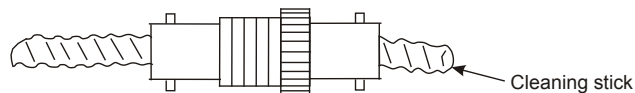
**Clean connector ferrule** inside adapter by inserting lightly moistened cleaning stick with fiber optic cleaning solution (or >91% isopropyl alcohol) inside the adapter until contact is made with connector on opposite end. Rotate cleaning stick with medium pressure in one circular motion as it is pulled away from the adapter. Repeat process using dry cleaning stick.

**Caution:** Signal strength will be affected if end and sides of ferrule are not thoroughly cleaned. Discard cleaning sticks after each use. Do not turn cleaning sticks back and forth pressing against connector end face. This may cause scratches if large contamination is present. Always inspect connector end face for contamination after each cleaning.



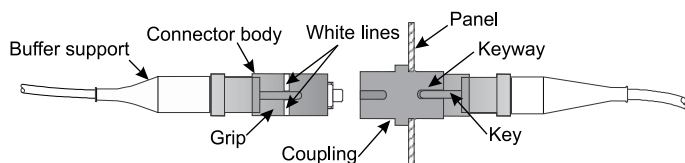
**Clean adapter** by inserting adapter cleaning stick (or fiber adapter sleeve brush) moistened with fiber optic cleaning solution (or >91% isopropyl alcohol) inside the adapter and gently pull out with twisting motion. Repeat process with a dry cleaning stick.

**Caution:** Discard cleaning sticks after each use. Do not try to clean the adapter with cleaning stick if a connector is mounted in one side.



## Install SC Connectors into Adapter

1. Install each connector into the adapter by aligning the key on the connector body with the keyway on the adapter. The connector is properly installed when the white line in the grip disappears inside the adapter.
2. If a high-loss condition exists, use the SC cleaning procedures and reinstall the connectors as described in Step 1.
3. When doing rearrangements or reinsertions of SC connectors, use the SC cleaning procedures to clean all components and reinstall the connectors as described in Step 1.

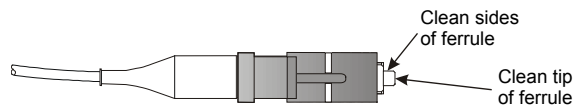


## Clean SC Connector and Adapter

**Clean exposed connector ferrule** by lightly moistening lint-free wipe with fiber optic cleaning solution (or >91% isopropyl alcohol), and by applying medium pressure, first wipe against wet area and then onto dry area to clean potential residue from end face.

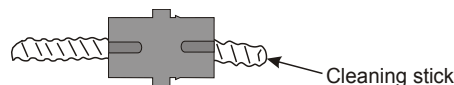
**Clean connector ferrule** inside adapter by inserting lightly moistened cleaning stick with fiber optic cleaning solution (or >91% isopropyl alcohol) inside the adapter until contact is made with connector on opposite end. Rotate cleaning stick with medium pressure in one circular motion as it is pulled away from the adapter. Repeat process using dry cleaning stick.

**Caution:** Signal strength will be affected if end and sides of ferrule are not thoroughly cleaned. Discard cleaning sticks after each use. Do not turn cleaning sticks back and forth pressing against connector end face. This may cause scratches if large contamination is present. Always inspect connector end face for contamination after each cleaning.

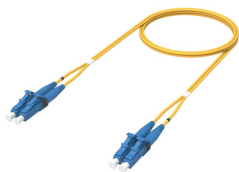


**Clean adapter** by inserting adapter cleaning stick (or fiber adapter sleeve brush) moistened with fiber optic cleaning solution (or >91% isopropyl alcohol) inside the adapter and gently pull out with twisting motion. Repeat process with a dry cleaning stick.

**Caution:** Discard cleaning sticks after each use. Do not try to clean the adapter with cleaning stick if a connector is mounted in one side.



Base Product



Fiber Optic Patch Cord, Singlemode, LC/UPC to LC/UPC duplex, 1.8 mm LSZH & OFNR, Yellow

Product Classification

Regional Availability	Asia   Australia/New Zealand   China   India
Portfolio	CommScope®
Product Type	Fiber patch cord, duplex
Product Series	210

General Specifications

Connector A, quantity	2
Color, boot A	Blue
Color, connector A	Blue
Connector B, quantity	2
Color, boot B	Blue
Color, connector B	Blue
Interface, Connector A	LC/UPC
Interface, Connector B	LC/UPC
Jacket Color	Yellow
Polarity	Pairs, flipped
Total Fibers, quantity	2

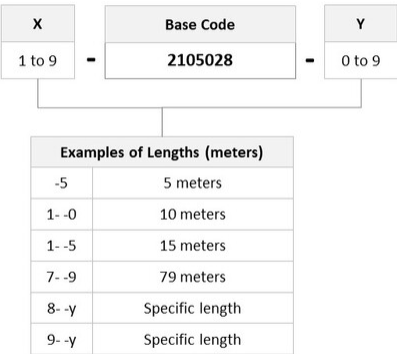
Dimensions

Cable Assembly Length Range (m)	1 – 100
Diameter Over Jacket	1.8 mm   0.071 in

Ordering Tree



# 2105028



## Mechanical Specifications

**Cable Retention Strength, maximum** 11.24 lb @ 0 ° | 11.24 lb @ 0 °

## Optical Specifications

**Fiber Mode** Singlemode

**Fiber Type** G.657.A2, TeraSPEED®

**Insertion Loss, maximum** 0.25 dB

**Return Loss, minimum** 50 dB

## Environmental Specifications

**Operating Temperature** -10 °C to +60 °C (+14 °F to +140 °F)

**Environmental Space** Dual Rated LSZH/Riser

**Qualification Standards** IEC 60332-1 | IEC 60332-3 | IEC 60754 | IEC 61034

## Packaging and Weights

**Packaging quantity** 1

# CERTIFICATE

Certificate Number: 111045.000  
Including Seven Page Addendum

The Quality Management System and implementation of:

## CommScope, Inc.

With Virtual Central Function at:  
1100 CommScope Place SE  
Hickory, NC 28602  
United States

meets the requirements of the standard:

## ISO 9001:2015

### Scope:

The sales, marketing, design, manufacture, test, repair, support, service, and distribution of telecommunications products, components, and services for the telecommunications, wireless, and broadcast networks industries

Certificate Expires: January 04, 2026  
Certificate Issued: January 05, 2023  
Certified Since: January 10, 2001

Business Segments	Exceptions
Connectivity and Cable Solutions (CCS)	None
Networking, Intelligent Cellular & Security Solutions (NICS)	None
Outdoor Wireless Networks (OWN)	None
Access Network Solutions (ANS)	None



Dr. Cem O. Onus  
Managing Director

DEKRA Certification, Inc.  
1945 The Exchange SE #300  
Atlanta, GA 30339 USA  
(215) 997-4519  
<https://www.dekra.us/en/audits/>





# CERTIFICATE ADDENDUM

Certificate Number: 111045.000  
ADDENDUM Page One of Seven

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**ISO 9001:2015**

<b>Site Activities Legend:</b>	HQ = Headquarters	MFG = Manufacturing	SER = Services (Professional Services and/or Technical Support)
	HW DE= Hardware Development	REP = Repair	SC = Purchasing, Supplier Management, Manufacturing Support, Repair Support
	SW DE= Software Development	SAL = Sales, Marketing	DIST = Distribution

<b>Site Address</b>	<b>Site Activities</b>
CommScope Inc 1100 CommScope Place SE Hickory, NC 28602 United States	HQ (Virtual)
ARRIS Technology, Inc. 3871 Lakefield Drive Suwanee, GA 30024 United States	HW & SW DE, SAL, SER, SC
ARRIS Technology, Inc. 101 Tournament Dr. Horsham, PA, 19044 United States	HW & SW DE, SAL, SER, SC
ARRIS Technology, Inc. 6450 Sequence Drive San Diego, CA 92121 United States	SW DE, SER
ARRIS Technology, Inc. 900 Chelmsford St. Lowell, MA 01851 United States	HW & SW DE, SER, SC

Certificate Expires: January 04, 2026  
Certificate Issued: January 05, 2023  
Certified Since: January 10, 2001



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# CERTIFICATE ADDENDUM

Certificate Number: 111045.000  
ADDENDUM Page Two of Seven

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**ISO 9001:2015**

Site Address	Site Activities
ARRIS Solutions, Inc. 2400 Ogden Ave., Suite 180 Lisle, IL 60532 United States	HW & SW DE, SAL, SER, SC
ARRIS 15 Sterling Drive Wallingford, CT 06492 United States	HW & SW DE, SER, SC
ARRIS Technology, Inc. 2450/2500 Walsh Avenue Santa Clara, CA 95051 United States	HW & SW DE, SAL, SER
Ruckus Wireless International Inc. 350 West Java Dr. Sunnyvale, CA 94089 United States	HW & SW DE, SER
Ruckus Wireless Network Technology (Shenzhen) Co. Ltd. Units C&D, 5th Floor, No. 2 Finance base, 8 KeFa Road, Shenzhen, China	SW DE, SC, HW DE

Certificate Expires: January 04, 2026  
Certificate Issued: January 05, 2023  
Certified Since: January 10, 2001



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# CERTIFICATE ADDENDUM

Certificate Number: 111045.000  
ADDENDUM Page Three of Seven

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**ISO 9001:2015**

Site Address	Site Activities
<b>Site Address</b>	<b>Site Activities</b>
CommScope Asia (Suzhou) Technologies Co., Ltd. 77 Qiming Road, Suzhou Industrial Park Suzhou, Jiangsu 215121 Peoples Republic of China	MFG, SC
Ruckus Wireless International Inc., Taiwan Branch @ Neihs District, Taipei City, Rui Road 411, 10th floor, Taipei	SW DE
ARRIS Group India Pvt Limited (AGIPL) Salarpuria Supreme, Ground Floor West Wing & First Floor Munnekolalu Village, Varthur Hobli, Outer Ring Road, Bangalore-560037	SW DE
ARRIS Group de Mexico S.A. de C.V. Av. La Paz 11721 Parque Industrial Pacifico Tijuana, BC 22643 Mexico	MFG, REP, SC
ARRIS Communications Ireland Limited Building 4300, Cork Airport Business Park Kinsale Road Cork County Ireland	HW & SW DE
ARRIS Group India Private Limited "The Senate" No:33/1, Ulsoor Road, Bangalore - 560 042 India	HW & SW DE

Certificate Expires: January 04, 2026  
Certificate Issued: January 05, 2023  
Certified Since: January 10, 2001



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Managing Director

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# CERTIFICATE ADDENDUM

Certificate Number: 111045.000  
ADDENDUM Page Four of Seven

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**ISO 9001:2015**

Site Address	Site Activities
ARRIS Group, Inc. 50 Stranmillis Embankment Belfast, BT95FL Northern Ireland	SW DE
CommScope Czech Republic, s.r.o. Turanka 856/98B 627 00 Brno Czech Republic	HW DE,
CommScope CZ, spol. s.r.o. U Morusi 888, 53006 Pardubice Czech Republic Czech Republic	HW DE,
CommScope Connectivity UK Limited Units 1 and 4 Kinmel Park Industrial Estate Bodelwyddan, Denbighshire, LL18 5TZ United Kingdom	HW DE, MFG, SAL
CommScope Design & Integration UK Ltd. Unit 5 & 6 Eden Business Park Eden House Drive Old Malton, Malton, North Yorkshire YO17 6AE United Kingdom	HW DE, MFG, SC

Certificate Expires: January 04, 2026  
Certificate Issued: January 05, 2023  
Certified Since: January 10, 2001



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Managing Director

DEKRA Certification, Inc.  
1945 The Exchange SE #300  
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# CERTIFICATE ADDENDUM

Certificate Number: 111045.000  
ADDENDUM Page Five of Seven

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**ISO 9001:2015**

Site Address	Site Activities
CommScope Design & Integration UK Limited 412 The Quadrant, Birchwood Park Warrington, WA3 6FW United Kingdom	SER
CommScope EMEA Ltd. Corke Abbey Avenue Bray, Co. Dublin Ireland	MFG, SAL
CommScope EMEA Ltd. Diestsesteenweg 692 3010 Kessel-Lo, Belgium	HW DE, MFG, SAL
CommScope Italy Srl Via Archimede, 22/24 Agrate Brianza (MB) 20864 Italy	HW DE, REP, SW DE
Telecom Networks Americas AV. HIPOLITO YRIGROYEN 2999, DEPOSITO 6 EL TALAR, TIGRE Buenos Aires B1618AXD Argentine Republic	SAL, DIST
CommScope Networks India Private Limited Salarpuria Softzone, A Block, 1st Floor Survey No 80/1, 81/1, 81/2, B Wing, Belandur Village, Varthur Hobli, Outer Ring Bangalore – Karnataka 560103 India	SW DE
ADC India Communications Ltd. No 10 C , 2nd Phase Peenya Industrial Area Bangalore – Karnataka 560058 India	MFG, SC

Certificate Expires: January 04, 2026  
Certificate Issued: January 05, 2023  
Certified Since: January 10, 2001



**Dr. Cem O. Onus**  
Managing Director

DEKRA Certification, Inc.  
1945 The Exchange SE #300  
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# CERTIFICATE ADDENDUM

Certificate Number: 111045.000  
ADDENDUM Page Six of Seven

The Quality Management System and implementation of:

**CommScope, Inc.**

With site at:

**CommScope Asia (Suzhou) Technologies Co.,Ltd.**

77 Qiming Road, Suzhou Industrial Park

Suzhou, Jiangsu 215121

Peoples Republic of China

meets the requirements of the standard:

## ISO 9001:2015

The validity of this certificate depends on the validity of the main certificate.

### Scope:

Production of network cable, fiber cable and communication equipment component (copper patch cords, copper panel, accessories etc.)

**Certification Structure:** Multi-site

Certificate Expires:	January 04, 2026
Certificate Issued:	January 05, 2023
Certified Since:	January 10, 2001



Dr. Cem O. Onus  
Managing Director

DEKRA Certification, Inc.  
1945 The Exchange SE #300  
Atlanta, GA 30339 USA  
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# 证书附录

证书编号: 111045.000

附录第7页,共7页

质量管理体系和实施:

**CommScope, Inc.**

其场所:

**康普科技 (苏州) 有限公司**

中国江苏省苏州工业园区启明路77号,邮编215121

符合以下标准要求:

## ISO 9001:2015

本证书的有效性取决于主证书的有效性。

### 范围:

网络线、光缆、通信系统设备材料 (网络跳线、配线装置等) 的生产。

认证结构: 多场所

证书有效期: 2026.01.04

发证日期: 2023.01.05

首次发证日期: 2001.1.10



Dr. Cem O. Onus  
Managing Director

DEKRA Certification, Inc.  
1945 The Exchange SE #300  
Atlanta, GA 30339 USA  
(215) 997-4519  
<https://www.dekra.us/en/audits/>



# Certificate of Registration

## ENVIRONMENTAL MANAGEMENT SYSTEM - ISO 14001:2015

This is to certify that:

CommScope, Inc. of North Carolina  
1100 CommScope Place SE  
Hickory  
North Carolina  
28603-0339  
USA


Holds Certificate No:

**EMS 648387**

and operates an Environmental Management System which complies with the requirements of ISO 14001:2015 for the following scope:

The environmental management system to control the risks associated with the manufacture, distribution, field support and central function of telecommunication products and services.

For and on behalf of BSI:

  
Carlos Pitanga, Chief Operating Officer Assurance – Americas

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 1 of 5



...making excellence a habit.™

Certificate No: **EMS 648387**

Location	Registered Activities
Andrew Telecommunications de Reynosa S. de R.L. de C.V. Av. Industrial Reynosa Lte 2 al 5 Parque Industrial Center Reynosa Tamaulipas 88780 Mexico	Manufacture and distribution of telecommunication products including antenna and cable.
CommScope Asia (Suzhou) Technologies Co., Ltd. EPZ II, 77 Qiming Road Suzhou Industrial Park Suzhou Jiangsu 215121 China	Manufacture and distribution of telecommunication products, including cable.
Andrew Telecommunications India Pvt. Ltd. Plot No. N-2, Phase IV Verna Industrial Estate Verna Salcette Goa 403 722 India	Manufacture and distribution of telecommunication products, including antenna and cable.
CommScope EMEA Ltd. Corke Abbey Avenue Bray County Dublin A98FY03 Ireland	Manufacture and distribution of telecommunication products, including cable and connectors.
CommScope Telecommunications (China) Co., Ltd. 68 West Su Hong Xi Lu Suzhou Industrial Park Suzhou Jiangsu 215021 China	Manufacture and distribution of telecommunication products, including antenna and cables.

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 2 of 5

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Information and Contact: BSI, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP. Tel: + 44 345 080 9000  
BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.  
A Member of the BSI Group of Companies.

Certificate No: **EMS 648387**

Location	Registered Activities
Andrew Wireless Systems GmbH Industriering 10 Buchdorf 86675 Germany	Manufacture and distribution of telecommunication products, including amplifiers and antenna systems.
CommScope, Inc. of North Carolina 1100 CommScope Place SE Hickory North Carolina 28603-0339 USA	Corporate headquarters responsible for management system oversight of all locations listed on this certificate.
CommScope Inc. 6519 CommScope Road Catawba North Carolina 28609-0199 USA	Manufacture and distribution of telecommunication products, including cable.
CommScope Inc. 3642 US Hwy 70 East Claremont North Carolina 28610-0879 USA	Manufacture and distribution of telecommunication products, including cable.
CommScope Czech Republic s.r.o. Turanka 98B Brno 62700 Czech Republic	Manufacture and distribution of telecommunication products, including connectors and terminations.
CommScope Inc. of North Carolina 1100 CommScope Place SE Hickory North Carolina 28603-0339 USA	Customer care, facility maintenance, and administrative functions.
ADC de Delicias, S. de R.L. de C.V. Blvd. Fernando Baeza No. 1301 Sur Delicias Chihuahua 33000 Mexico	Manufacturing and distribution of telecommunication products.

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 3 of 5

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To be read in conjunction with the scope above or the attached appendix.

Information and Contact: BSI, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP. Tel: + 44 345 080 9000

BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.

A Member of the BSI Group of Companies.



Certificate No: **EMS 648387**

Location	Registered Activities
ADC de Juarez S. de R.L. de C.V. Parque Industrial Antonio J Bermudez Ciudad Juarez Chihuahua 32470 Mexico	Manufacturing and distribution of telecommunication products.
CommScope Connectivity Belgium bvba Diestsesteenweg 692 Kessel-lo 3010 Belgium	Manufacture and distribution of telecommunication products.
CommScope Technologies de Juarez S. de R.L. de C.V. Santiago Troncoso 331 Praderas del Sur, Ciudad Juarez Chihuahua 32575 Mexico	Manufacture of Fiber Optic Splice Closures (FOSC), Fiber Guide Systems (FGS), Hardened Connectivity and Molding-Gel Filling, including: plastic injection molding, plastic extrusion, plastic and metal machining, and assembly operations.
CommScope Connectivity UK Limited Unit 1 Kinmel Park Bodelwyddan Rhyl, Denbighshire LL18 5TZ United Kingdom	Fibre optic cable manufacturing, termination and design of other telecommunication products and services.
CommScope 11312 S. Pipeline Road Eules Texas 76040 USA	Manufacture, distribution, field support and central function of telecommunication products.
ARRIS GROUP DE MEXICO SA DE CV Av. De la Paz, #11721 Parque Industrial Pacifico Tijuana Baja California 22643 Mexico	Manufacture, repair, support, repair service, distribution of products and components for telecommunications that provide integrated solutions for voice, video and data through the processes of SMT, manual and mechanical assembly, soldering (manual, selective, printed, wave) electrical testing and packaging.

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 4 of 5

This certificate remains the property of BSI and shall be returned immediately upon request.

An electronic certificate can be authenticated [online](https://www.bsigroup.com/ClientDirectory). Printed copies can be validated at [www.bsigroup.com/ClientDirectory](https://www.bsigroup.com/ClientDirectory)

To be read in conjunction with the scope above or the attached appendix.

Information and Contact: BSI, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP. Tel: + 44 345 080 9000

BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.

A Member of the BSI Group of Companies.

Certificate No: **EMS 648387**

Location	Registered Activities
CommScope Design & Integration UK Ltd Unit 5 & 6, Eden Business Park Edenhouse Drive Old Malton Malton YO17 6AE United Kingdom	Manufacture and distribution of telecommunications products including cabinets.
Arris Indústria Eletrônica do Brasil Ltda. CNPJ: 09.154.836/0001-15 Avenida Torquato Tapajós, 9475 Tarumã Manaus Amazonas 69041-025 Brasil	Manufacturer and distribution of Receivers, Television signal Decoders and Modulator/Router.
CommScope Design and Integration UK Ltd. Lovell House, 412 The Quadrant Birchwood Park Warrington WA3 6FW United Kingdom	Telecommunications project management, site surveys, installations commissioning and rigging.

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

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Page: 5 of 5

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## LIMITED WARRANTY



1. **Definitions.** For purposes of this Warranty, (i) "Buyer" shall mean the individual or entity identified on the applicable purchase order or supply agreement (or, if different, on Seller's quotation, order acknowledgement or statement of work ), (ii) "Seller" shall mean the CommScope entity identified on such entity's quotation, order acknowledgement, statement of work or supply agreement, (iii) "Hardware" means equipment designed and manufactured by or on behalf of Seller, or any third-party manufacturer's equipment offered for sale by Seller to Buyer, (iv) "Product" shall mean a product manufactured by or on behalf of Seller pursuant to the applicable supply agreement, quotation or order acknowledgement, and includes any combination of Hardware and Software, (v) "Services" means site engineering, system integration, product installation, implementation, training, maintenance and technical support services for Products, or other professional services provided by Seller to Buyer. Services exclude managed services and hosted cloud services provided by Seller, (vi) "Software" means Seller-licensed software, either embedded or standalone, including any updates provided, and any other enhancements, modifications, and bug fixes provided thereto, in object code form only (unless otherwise specified), and any full or partial copies thereof. Software does not include software created or owned by third parties, including but not limited to MediaKind Software, Google's Android Software or any third party application software, and (vii) "Warranty Period" means, unless a different time period is set forth in **Exhibit A**, (a) for Hardware, one year from date of original shipment from Seller's facility, (b) for Software-only Products, ninety (90) days from the date such Software is first made available to Buyer, or for Software embedded in a Hardware Product, ninety (90) days from date of original shipment of the Product from Seller's facility, and (c) for Services, thirty (30) days from the date the performance of such Services has been rendered.

2. **Limited Warranty.** Seller warrants that, as of the date of delivery, Seller has good title to the Product, free from any lawful security interest or other lien or encumbrance unknown to Buyer. In addition, during the Warranty Period, the Product and Services will be free from defects in materials or workmanship arising under proper and normal use. This Warranty shall apply only to the Products and Services and shall not apply to any other goods or materials, parts or components of a system or any system as a whole. This Warranty does not cover ordinary wear and tear. Seller does not warrant (i) Products not purchased from Seller or its authorized resellers; (ii) that the operation of the Product will be uninterrupted or error-free; (iii) that the Product will operate in combination with other third-party products selected by Buyer; or (iv) any products manufactured by third parties; provided that Seller will, to the extent permitted by the manufacturer, assign third-party warranties to Buyer. Seller gives no warranty for, and shall have no liability with respect to, any defects arising from any software (other than the Software), including, but not limited to MediaKind Software, Android Software or any third-party application software, downloaded to or otherwise used in conjunction with the Product. Seller further warrants to Buyer that during the Warranty Period, all Services performed by Seller for Buyer will be provided in a workmanlike manner.

3. **Disclaimers.** EXCEPT AS EXPRESSLY SET FORTH IN THIS LIMITED WARRANTY OR IN A SEPARATE, APPLICABLE SOFTWARE LICENSE AGREEMENT, ALL SOFTWARE IS LICENSED ON AN "AS IS" BASIS WITHOUT WARRANTY.

4. **Inspection and Return Authorization.** Buyer must promptly notify Seller of any claimed defect in the Product and/or Services. If Buyer claims that a Product is defective in materials or workmanship, Seller shall have the right to either examine the Product where it is located or, in its sole discretion, issue shipping instructions for return of the Product. Seller's inspection in response to a warranty claim shall not constitute acceptance or acknowledgment of the claim's validity. Except as otherwise agreed to in writing, Products may not be returned to Seller without prior authorization. Buyer must contact Seller to obtain an authorization number and return the Products to the location designated by Seller. Any Products returned to Seller without proper authorization will be returned to Buyer at Buyer's expense. Risk of loss, damage and insurance responsibilities for the Products shall not pass from Buyer to Seller until delivery of the Products to Seller's designated location. Buyer shall prepay all transportation charges for such return.

5. **Remedies.** Seller's sole and exclusive obligation and Buyer's exclusive remedy under this Warranty is Seller's repair or replacement of the defective Product or re-performance of Services or issuance of a credit for the net book value of the purchase price of the defective Product. Seller shall have sole discretion as to which of these remedies Seller will provide. Seller is not liable for any repair or maintenance costs incurred by Buyer, unless Seller authorizes such charges in writing in advance of the commencement of the work. If Seller elects to replace or repair the defective Product, the replaced or repaired Product will be warranted for the remainder of the Warranty Period applicable to the originally shipped Product, but the Warranty shall not be extended beyond the original Warranty Period. Replacement Products may be new, refurbished or contain refurbished materials.

6. **Notice and Waiver.** If Buyer discovers any defect in the Product, Buyer must provide prompt (and in no case later than thirty (30) days after discovery) written notice to Seller of the claimed defect. Such notice shall describe, in reasonable detail, the symptoms of such defect. The notice must be received by Seller during the Warranty Period for such Product. Failure to give timely notice of a claim shall result in Buyer's waiver of such claim.

7. **Transfer of Ownership.** This Warranty is not transferable unless Buyer is expressly authorized by Seller in writing to resell the Product. In addition, Buyer must notify Seller on or before the fifteenth (15<sup>th</sup>) day after the date on which it transfers ownership of the warranted Product. Any transfers in violation of this Section shall invalidate this Warranty. Notice of the transfer of ownership must be in writing and shall include the name and address of the new owner.

8. **Exclusions from Warranty.** This Warranty shall not apply to problems attributable to, or as a result of:

- (a) improper installation or misapplication of parts;
- (b) chain or system failures induced by other products or components;
- (c) lack of proper inspection or maintenance or failure to provide a suitable operating environment;
- (d) any consumables provided with the Product, including but not limited to batteries and other accessories, and any other materials, components or products manufactured by a third party;
- (e) power surges, fire, unusual mechanical, physical or electrical stress, severe weather conditions or acts of nature, including but not limited to, lightning or floods;
- (f) usage or operation not in accordance with published ratings, specifications or instructions, including but not limited to environmental specifications identified by Seller;
- (g) any adjustment, modification, alteration, removal or repair of any part of the Product, including but not limited to removal or alteration of serial numbers or other identifying marks not expressly authorized by Seller in writing;
- (h) accidental damage, misuse, abuse, neglect or unauthorized access of the Product or of any system of which the warranted Product is a part;
- (i) any type of aesthetic changes due to oxidation or corrosion occurring on stainless steel or galvanized steel parts installed in unusually corrosive marine and industrial atmospheres (in which case Seller's only obligation shall be to ensure that Product complies with Seller's published material specifications);
- (j) use of the Product for purposes other than that for which it was designed; or
- (k) mishandling during shipment of the Product.

## LIMITED WARRANTY

This Warranty is for Products installed and used in accordance with Seller's design, installation and operating parameters. Buyer's failure to ensure conformity with such parameters will void all warranties. Under no circumstance shall Seller have any liability or obligation with respect to expenses, liabilities or losses associated with the installation or removal of any Product or the installation or removal of any components for inspection, testing or redesign occasioned by any defect or by any repair or replacement of a Product.

9. **Limitation on Liability.** THE WARRANTIES SET FORTH IN SECTION 2 HEREOF ARE EXCLUSIVE AND ARE MADE ONLY TO BUYER. SELLER MAKES NO OTHER REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, AND SPECIFICALLY DISCLAIMS AND EXCLUDES ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY, NONINFRINGEMENT OR FITNESS FOR A PARTICULAR PURPOSE AND ANY REPRESENTATION OR WARRANTY ARISING BY USAGE OF TRADE, COURSE OF DEALING OR COURSE OF PERFORMANCE. No person is authorized to give any additional warranties on Seller's behalf or to assume for Seller any other liability, except in a writing signed by an authorized officer of Seller. SELLER'S TOTAL LIABILITY FOR ANY CLAIM OR DAMAGE ARISING OUT OF AND/OR IN CONNECTION WITH THE MANUFACTURE, SALE, DELIVERY OR USE OF THE PRODUCTS OR SERVICES WILL BE LIMITED TO PROVEN DIRECT DAMAGES, NOT TO EXCEED (I) FOR PRODUCTS, THE DEPRECIATED VALUE OF THE PURCHASE PRICE OF SUCH PRODUCTS OR (II) FOR SERVICES, THE ACTUAL AMOUNT PAID TO SELLER FOR SERVICES DURING THE 12 MONTH PERIOD IMMEDIATELY PRIOR TO THE EVENT (OR SERIES OF EVENTS) GIVING RISE TO THE LIABILITY. IN NO EVENT WILL SELLER BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL OR PUNITIVE DAMAGES, INCLUDING, WITHOUT LIMITATION, ANY CLAIM FOR LOSS OF ACTUAL OR ANTICIPATED DATA, USE, REVENUES OR PROFITS. The Products are not specifically designed, tested, manufactured or intended for operation or use in any inherently dangerous, life endangering or life support applications where any failure of the Products could lead to death, personal injury or significant physical or environmental damage (High Risk Activities). If Buyer uses the Products in High Risk Activities, including but not limited to nuclear facilities or the flight, navigation or communication of aircraft, Buyer agrees that neither Seller nor its third party licensors are liable in whole or in part, for any claims or damages arising from such use, and that Buyer shall indemnify and hold Seller and its third party licensors harmless from any and all claims for loss, cost, damage, expense or liability arising out of or in connection with any use of the Products in High Risk Activities. These limitations on liability will apply regardless of the form of action, whether in contract, tort, strict liability or otherwise, and whether damages were foreseeable and will survive failure of any exclusive remedies provided in Section 4 hereof.

10. **Choice of Law.** The terms and conditions contained herein and the rights of the parties to any transaction to which they relate shall be governed by and construed in accordance with the laws of the State of North Carolina, U.S.A. The United Nations Convention on Contracts for the International Sale of Goods shall not apply.



## LIMITED WARRANTY

### Exhibit A

Product Categories	Warranty Period from Original Shipment Date*
<b>Category A Products</b> E6000® Converged Edge Router (CER); E6000n™ Remote PHY Devices (RPDs); E6000r™ Remote PHY Shelves; E6000n™ Remote MACPHY Devices (RMDs); vManager; Remote OLT (R-OLT); associated power supplies and accessories. FLX PON OLT portfolio including vOLT. CherryPicker products, Encoder products including ME-7000, SE-6000; DSR-4xxx, DSR-6xxx and DSR-7xxx series IRD products, and Uplink systems including TME-2020, VDP-1000, BNC, DEM, and SEM; All APEX Universal EQAM including APEX1000 and APEX3000; All Aloha interactive products including OM2000, ARPD, ADM4000 and NC1500 4.0. All SDM products. All VUE and VTM Software Products. All STDC products.	Hardware One (1) Year Software Ninety (90) Days
<b>Category B Products</b> All High and Standard Definition Transport Adapter MS4000™ Media Streamer	Hardware One (1) Year Software Ninety (90) days ** For certain CPE, option for 1% overship in lieu of Hardware warranty is standard
<b>Category C Products</b> Intentionally left blank.	
<b>Category D Products</b> All Third Party OEM Products: power meters; All VUE and VTM hardware platforms; NC1500 4.0 hardware platform; LQA256 Legacy QAM Adapter; Elemental Products including Live, Server, Delta, Conductor and StatMux; DC2180 Cabinet Node, Cooling Systems	Pass Through from OEM: Hardware One (1) Year Software Ninety (90) Days
<b>Category E Products</b> Intentionally left blank	
<b>Category F Products</b> All OM and SG optical node platforms, Flex Max® and Starline® amplifier platforms, RF Taps & Passives, and Optical Passives	Hardware Five (5) Years within the United States and Canada Hardware Three (3) Years outside United States and Canada Software Ninety (90) Days
<b>Category F1 Products</b> All CHP Headend Optical (HEO) Elements	Hardware Three (3) Years Software Ninety (90) Days
<b>Category G1 Products</b> All NC optical node platforms and Optical Passives, including OP/NP/DP/DC models.	Hardware Five (5) Years Software Ninety (90) Days
<b>Category G2 Products</b> All CH3 Headend (HEO) Elements	One (1) year
<b>Category G3 Products</b> All EPON and GPON ONUs, RFoG/HPON R-ONUs, including, CP8 models and associated power supplies and accessories	Hardware Three (3) Years Software Ninety (90) Days

## LIMITED WARRANTY

<b>Category H Products</b> All ConvergeMedia™ Distribution Platforms and Management Suite, AdManager™ including SkyVision Ad Management and EMP solutions CVEx™, SVA, all Vertasent products including SVOM, SVM and ERM, AdEdge™ COM and AdEdge APS,VMS, Manifest Delivery Controller (MDC), ARRIS Video Content Manager (AVCM) and Next Generation Insertion (NGI) and Multicast ABR.	Hardware One (1) Year Software Ninety (90) Days
<b>Category I Products</b> ServAssure® Advanced, ServAssure® NXT - Alarm Central, ServAssure® NXT - Analyze, ServAssure Domain Manager and EventAssure™. WorkAssure™® Workforce Management, Mobile TV, SecureMedia and Titanium	Hardware One (1) Year Software Ninety (90) Days
<b>Category J Products</b> Intentionally left blank	
<b>Category K Products</b> Intentionally left blank.	
<b>Category L Products</b> Intentionally left blank	
<b>Category M Products</b> Intentionally left blank.	
<b>Category N Products</b> Intentionally left blank.	
<b>Category O Products</b> All CAS Products including DAC, CASMR (and associated plug-ins), CAST, Advisor, CSS, OLL, CSS-Lite, KLS, DKS, CPMS	DAC, CASMR, CAST, Advisor, CSS Hardware Three (3) Years OLL, CSS-Lite, KLS, DKS, OLES, CPMS Hardware One (1) Year Software Ninety (90) Days
<b>Category P Products</b> Intentionally left blank.	
<b>Category P1 Products</b> Intentionally left blank	
<b>Category Q Products</b> Intentionally left blank	
<b>Category R Products</b> Intentionally left blank	
<b>Category R1 Products</b> Intentionally left blank	
<b>Category S Products</b> Intentionally left blank	
<b>Category S1 Products</b> Intentionally left blank	

## LIMITED WARRANTY

<p><b>Category T Products</b> RUCKUS Wi-Fi</p>	<p>Hardware:</p> <ul style="list-style-type: none"> <li>- Indoor Access Points and Wall Plate Access Points – Limited Lifetime Warranty,** except for access points with an “e” suffix (e.g., R350e), for which the HW warranty period is one (1) year.</li> <li>- Outdoor Access Points – One (1) Year</li> <li>- Controllers – One (1) Year, except ZoneDirector controllers are covered by the Limited Lifetime Warranty**</li> </ul> <p>Software Ninety (90) Days</p>
<p><b>Category T1 Products</b> RUCKUS ICX Switches</p>	<ul style="list-style-type: none"> <li>- ICX Switches (including switch modules, PSUs, and Fans, but excluding removable optics/transceivers and LEDs) – Limited Lifetime Warranty,** except for ICX 7150- C08PT, for which the HW warranty period is 13 months.</li> <li>- LEDs – 12 months</li> <li>- Removable Optics/Transceivers – 60 months (13 months if shipped from Seller prior to June 1, 2021)</li> </ul> <p>Software: Limited lifetime access to defect repairs, and software maintenance updates through end of support date of product</p>
<p><b>Category T2 Products</b> Intentionally left blank</p>	
<p><b>Category U Products</b></p> <p>Other OSP Cable Products (P3®, Drop Coax, Fiber Cable, Fiber Drop Cable, CIC)</p> <p>NovuX Products</p> <p>Prodigy</p> <p>Products FDH</p> <p>Products</p> <p>Multiservice terminals (MST), Open Terminals (OTE) and Hardened Drop Cable</p> <p>Assemblies OSP “Box” Products</p> <p>Mini-RDTs and RDTs</p> <p>FOSC™, FIST™ and</p> <p>Tenio™</p> <p>OSP Copper Connect and Closure Products</p> <p>HELIAX® FiberFeed® Products, including FiberFeed® hybrid and fiber cables and assemblies, power cables and junction boxes</p> <p>Fiber Optic Panels, including Accessories, Mounting Hardware, Modules</p> <p>Fiber Optic Field Terminated Connectors, Kits, Tools, Consumables,</p> <p>Accessories Indoor Fiber Cable, Patch Cords, Cable Assemblies, Fiber Trunks</p> <p>Passive Optical Components and Value Added Modules (VAMs)</p> <p>FiberGuide® : Fiber cable Management System</p> <p>Optical Distribution Frames, including Modules, Blocks, Accessories and</p> <p>Hardware Cabinets Cable and Apparatus Products</p> <p>Alifabs™ Cabinets &amp; Ancillary Products</p> <p>Alifabs™ Telecommunications Towers and Accessories</p> <p>Metro Cell Products, including Enclosures; Integrated Pole; Standard Poles; Accessories; and Wood Pole Brackets</p>	<p>One (1) year</p>

## LIMITED WARRANTY

<b>Category V Products</b> ValuDAS® Passive Products, including Air Directional Couplers, Hybrid Couplers, High Power Splitters, and Cell-Max™ Antennas Standard Tower Mounted Amplifier, Bias Tee and Power Distribution Unit Products Standard Filter & Combiner Products  Electronic Enclosure Products (Cabinets)  Alifabs™ Free Cooling Products and Accessories and Spare Parts, including  Monitor All-In-One FLX (Active Passive Cabines)  PowerShift™ & Power Products	Two (2) years
<b>Category W Products</b> ValuSite® Products  I-Line Accessory Products  Microwave Antennas  Terrestrial Microwave System Products (including Microwave System Flex-Twist, Coupler, Filter and Diplexer Products)	Three (3) years
<b>Category X Products</b> Broadband RF Connectivity Products   Premium Passive Products, including In-Building Directional Couplers, Hybrid Matrices, Tappers, Power Splitters, Terminations, Attenuators and CMAX Antenna Products	Five (5) years
<b>Category Y Products</b> QR® Coaxial Cable	Five (5) years
<b>Category Z Products</b> Standard RADIAX® Cable, Connector, Accessory and Cable Assembly* Products  * RADIAX® Cable Assembly Product means any RADIAX® coaxial cable that has been fitted with Seller's connectors in accordance with the installation instructions.	One (1) year
<b>Category AA Products</b> Standard CNT® Cable, Connector, Accessory and Cable Assembly* Products  * CNT® Cable Assembly Product means any CNT® coaxial cable that has been fitted with Seller's connectors by Seller or its certified distributor	Five (5) years; except that the Warranty Period for Products purchased for resale purposes shall be one (1) year.
<b>Category BB Products</b> Standard HELIAX® Cable, Connector, Accessory and Cable Assembly* Products  * HELIAX® Cable Assembly Product means any HELIAX® coaxial cable or elliptical waveguide that has been fitted with Seller's connectors by Seller or its certified distributor.	Ten (10) years; except for the following: (i) three (3) years for weatherproofing kits (including SureGuard boots); (ii) one (1) year for cable preparation tools (excluding blades); (iii) one year for single click-on hanger kits; and (iv) two (2) years for surge arrestors.
<b>Category CC Products</b> Standard ERA/ION-E®, ION-M®, ION-U®, MR, CMR, i-POI®, e-POI™, and Node Repeater Products	Hardware, the earlier of: (i) one (1) year from the date of installation; or (ii) fifteen (15) months from the date of shipment. Software Ninety (90) Days
<b>Category DD Products</b> In- Building and Fixed Subscriber Antennas	The earlier of: (i) three (3) years from the date of installation or (ii) thirty-nine (39) months from the date of original shipment



## LIMITED WARRANTY

<b>Category EE Products</b> OneCell®  Powered Fiber Cable Solution: Hybrid Copper and Fiber Cables, Class 2 Power Supplies, Indoor/Outdoor POE Extenders, Field Terminated Outlets, Consolidation Boxes and Related Passive Components	Hardware, the earlier of: (i) one (1) year from the date of installation; or (ii) fifteen (15) months from the date of original shipment Software Ninety (90) Days
<b>Category FF Products</b> Small Cell Device Management System (DMS) Software DAS Device Management System (AIMOS) Software	Ninety (90) days
<b>Category GG Products</b> Base Station Antenna, Small Cell Antenna & Mosaic™ Products	Two (2) years for all base station antennas except base station antennas incorporating N-type connectors, which shall have a warranty of one (1) year
<b>Category HH Products</b> DryLine® Dehydrator Systems and Line Monitoring Systems	Three (3) years or 3,000 hours of actual run time, whichever occurs first; except the Warranty Period for the compressor is only one (1) year or 1,000 hours of actual run time, whichever occurs first.
<b>Category II Products</b> SiteRise™ Solutions	One (1) year on workmanship for the Solution.
<b>Category JJ Products</b> Copper Structured Cabling Products  Other Enterprise Products (Coax, Automotive Cables, Enterprise Enclosures and miscellaneous items) (excluding software)	One (1) year from the date of Installation
<b>Category KK Products</b> Alifabs™ Services (power upgrades, enablements, installation and decommission work, rigging, and fault management)	One (1) year from the date of completion of the work.
<b>Category LL Products</b> imVision Overlays and Controllers	Three (3) years

*\* For Category H and Category I Products only, if Seller is engaged by Buyer to provide Services for the implementation of the purchased Products, warranty period for such Products shall commence upon Buyer's acceptance of the Products and Services.*

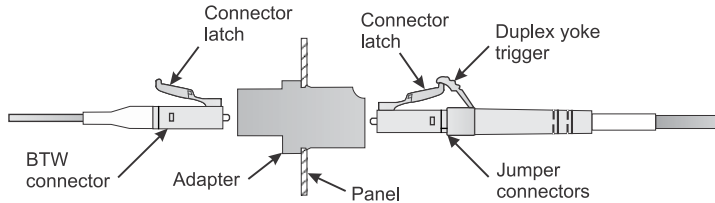
*\*\* For Category T Products only, "Limited Lifetime Warranty" means the period beginning on the Product shipment date and continuing for as long as the original end user of the Product continues to own and use the Product. For Category T1 Products only, "Limited Lifetime Warranty" means the period beginning on the Product shipment date and continuing (i) for as long as the original end user of the Product continues to own and use the Product or (ii) through the End of Support date, as defined in the RUCKUS End of Life Policy, whichever is earlier.*

**For optimal connectivity performance, invest in a Fiber Optic Inspection and Cleaning Kit for your installation team.**

CommScope® Cleaning and Inspection Kit – 760053199 -- Consumable Replacement Kit – 760053207

### Install LC Connectors into Adapter

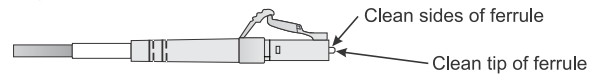
1. Install connectors into the adapter by aligning the latch on the connector with the slot on the adapter and gently push into place. An audible click is heard when the connector snaps into the adapter.
2. If a high-loss condition exists, use the LC cleaning procedures and reinstall the connector as described in Step 1.
3. When doing rearrangements or reinsertions of LC connectors, use the LC cleaning procedures to clean all components and reinstall the connectors as described in Step 1.



### Clean LC Connector and Adapter

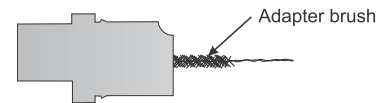
**Clean exposed connector ferrule** by lightly moistening lint-free wipe with fiber optic cleaning solution (or >91% isopropyl alcohol), and by applying medium pressure, first wipe against wet area and then onto dry area to clean potential residue from end face. **Clean connector ferrule** inside adapter by inserting lightly moistened cleaning stick with fiber optic cleaning solution (or >91% isopropyl alcohol) inside the adapter until contact is made with connector on opposite end. Rotate cleaning stick with medium pressure in one circular motion as it is pulled away from the adapter. Repeat process using dry cleaning stick.

**Caution:** Signal strength will be affected if end and sides of ferrule are not thoroughly cleaned. Discard cleaning sticks after each use. Do not turn cleaning sticks back and forth pressing against connector end face. This may cause scratches if large contamination is present. Always inspect connector end face for contamination after each cleaning.



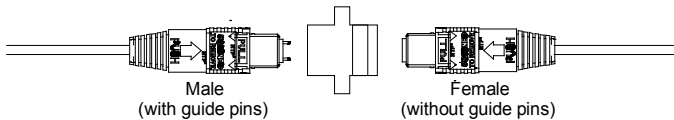
**Clean adapter** by inserting adapter cleaning stick (or fiber adapter sleeve brush) moistened with fiber optic cleaning solution (or >91% isopropyl alcohol) inside the adapter and gently pull out with twisting motion. Repeat process with a dry cleaning stick.

**Caution:** Do not try to clean adapter with a standard pipe cleaner. The sleeve inner diameter of LC adapters is too small. Do not try to clean the adapter with cleaning stick if a connector is mounted in one side. Discard cleaning sticks after each use.



### Install MPO Connectors into MPO Adapter

1. Before installing, remove the dust cap and refer to the MPO cleaning instructions.
2. Attach an MPO connector end into an MPO adapter by aligning the key on the connector body with the keyway in the adapter. Apply enough pressure till you hear a "click" sound, which signifies that the connector is plugged into the adapter.



3. If a high loss is present, remove the MPO connector, use the MPO cleaning instructions and reinstall the connector.
4. Whenever disconnecting and reconnecting the MPO connector, refer to the MPO cleaning instructions before reinstallation.

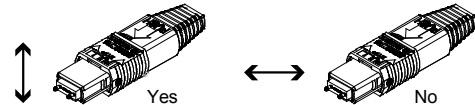
**Warning:** Do not connect male connector ends to each other. Doing so will damage the connector end face. Do not connect two female ends. If you do connect two female ends together, the test results will present a high insertion loss.



### Cleaning the MPO Connector and MPO Adapter

**Clean exposed connector ferrule** by lightly moistening lint-free wipe with fiber optic cleaning solution (or >91% isopropyl alcohol), and by applying medium pressure, first wipe against wet area and then onto dry area to clean potential residue from end face. **Clean connector ferrule** inside adapter by inserting lightly moistened cleaning stick with fiber optic cleaning solution (or >91% isopropyl alcohol) inside the adapter until contact is made with connector on opposite end. Applying medium pressure, wipe the end face in direction perpendicular to fiber array and all the way around each pin. Repeat process using dry cleaning stick.

**Caution:** Signal strength will be affected if end and sides of ferrule is not thoroughly cleaned. Discard cleaning sticks after each use. Do not turn cleaning sticks back and forth pressing against connector end face. This may cause scratches if large contamination is present. To prevent scratching the end face, always clean the MPO connectors with a cleaning motion from top to bottom. Never clean the MPO connector by rubbing across it from side to side.



**Clean adapter** by inserting adapter cleaning stick (or fiber adapter sleeve brush) moistened with fiber optic cleaning solution (or >91% isopropyl alcohol) inside the adapter and gently wiping inside surface. Repeat process with a dry cleaning stick.

**Caution:** Do not try to clean the adapter with cleaning stick if a connector is mounted in one side. Discard cleaning sticks after each use.

- For product information and support, visit us on the web at <http://www.commscope.com/SupportCenter>
- For technical assistance:
  - Within the United States, contact your local account representative or technical support at 1-800-344-0223. Outside the United States, contact your local account representative or Authorized Business Partner.
  - Within the United States, report any missing/damaged parts or any other issues to CommScope Customer Claims at 1-866-539-2795. Outside the United States, contact your local account representative or Authorized Business Partner.

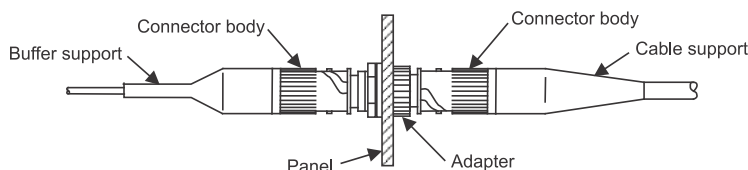
ST<sup>®</sup> and SC Connectors

For optimal connectivity performance, invest in a Fiber Optic Inspection and Cleaning Kit for your installation team.

CommScope<sup>®</sup> Cleaning and Inspection Kit – 760053199  
Consumable Replacement Kit – 760053207

Install ST<sup>®</sup> Connectors into Adapter

1. Install the connectors into the adapter by aligning the mark on the rim of the connector body with the slot in the adapter. Complete the connection by pushing the connector into the adapter with a clockwise twist-locking motion.
2. If a high-loss condition exists, use the ST cleaning procedures and reinstall the connectors as described in Step 1.
3. When doing rearrangements or reinsertions of ST connectors, use the ST cleaning procedures to clean all components and reinstall the connectors as described in Step 1.

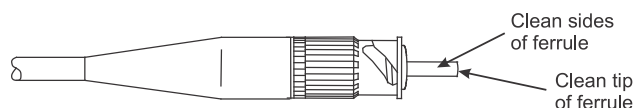


## Clean ST Connector and Adapter

**Clean exposed connector ferrule** by lightly moistening lint-free wipe with fiber optic cleaning solution (or >91% isopropyl alcohol), and by applying medium pressure, first wipe against wet area and then onto dry area to clean potential residue from end face.

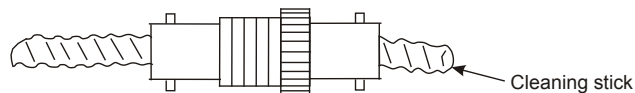
**Clean connector ferrule** inside adapter by inserting lightly moistened cleaning stick with fiber optic cleaning solution (or >91% isopropyl alcohol) inside the adapter until contact is made with connector on opposite end. Rotate cleaning stick with medium pressure in one circular motion as it is pulled away from the adapter. Repeat process using dry cleaning stick.

**Caution:** Signal strength will be affected if end and sides of ferrule are not thoroughly cleaned. Discard cleaning sticks after each use. Do not turn cleaning sticks back and forth pressing against connector end face. This may cause scratches if large contamination is present. Always inspect connector end face for contamination after each cleaning.



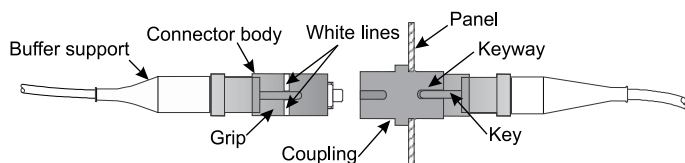
**Clean adapter** by inserting adapter cleaning stick (or fiber adapter sleeve brush) moistened with fiber optic cleaning solution (or >91% isopropyl alcohol) inside the adapter and gently pull out with twisting motion. Repeat process with a dry cleaning stick.

**Caution:** Discard cleaning sticks after each use. Do not try to clean the adapter with cleaning stick if a connector is mounted in one side.



## Install SC Connectors into Adapter

1. Install each connector into the adapter by aligning the key on the connector body with the keyway on the adapter. The connector is properly installed when the white line in the grip disappears inside the adapter.
2. If a high-loss condition exists, use the SC cleaning procedures and reinstall the connectors as described in Step 1.
3. When doing rearrangements or reinsertions of SC connectors, use the SC cleaning procedures to clean all components and reinstall the connectors as described in Step 1.

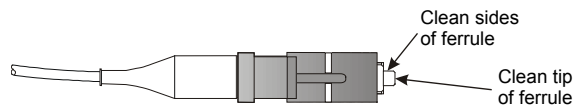


## Clean SC Connector and Adapter

**Clean exposed connector ferrule** by lightly moistening lint-free wipe with fiber optic cleaning solution (or >91% isopropyl alcohol), and by applying medium pressure, first wipe against wet area and then onto dry area to clean potential residue from end face.

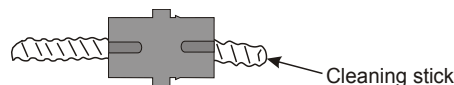
**Clean connector ferrule** inside adapter by inserting lightly moistened cleaning stick with fiber optic cleaning solution (or >91% isopropyl alcohol) inside the adapter until contact is made with connector on opposite end. Rotate cleaning stick with medium pressure in one circular motion as it is pulled away from the adapter. Repeat process using dry cleaning stick.

**Caution:** Signal strength will be affected if end and sides of ferrule are not thoroughly cleaned. Discard cleaning sticks after each use. Do not turn cleaning sticks back and forth pressing against connector end face. This may cause scratches if large contamination is present. Always inspect connector end face for contamination after each cleaning.



**Clean adapter** by inserting adapter cleaning stick (or fiber adapter sleeve brush) moistened with fiber optic cleaning solution (or >91% isopropyl alcohol) inside the adapter and gently pull out with twisting motion. Repeat process with a dry cleaning stick.

**Caution:** Discard cleaning sticks after each use. Do not try to clean the adapter with cleaning stick if a connector is mounted in one side.





# CERTIFICATE

Certificate Number: 151045.000

TLID: TL1786

With Five Page Addendum

The Quality Management System and implementation of:

**CommScope, Inc.**

With Virtual Central Function at:

1100 CommScope Place SE

Hickory, NC 28602

United States

meets the requirements of the standard:

## TL 9000 – H, S, V R6.2/R5.6 (Based on and including ISO 9001:2015)

### Scope:

The sales, marketing, design, manufacture, test, repair, support, service, and distribution of telecommunications products, components, and services for the telecommunications, wireless, and broadcast networks industries

Product Categories	Products
3.2.5 Fiber to the User	ASWXXXX, OLT (GPON)
3.2.6.2 Video Transmission Equipment	EQAM Products (APEX, SFP), Switched Digital Video and Resource Mgmt, Network Encryption (NE), ALOHA Interactive (ARPD, ADM, SDM), Cablevista Edge Decoder, Conditional Access Products
4.2.2.1 On line Non-critical	ECO Edge, ECO Service Management
6.2.5 Passive Optical Network Termination Units	ONT-1xxxx, ONT1xxx
6.2.6.1 Set Top Box	Digital Video Set Tops (VMS Series , IPC series)
3.1.1.1.1 Metallic Conductor Cable	All Products
3.1.1.1.2 Metallic Connectors	All Products
3.1.1.2.1 Fiber Optic Cable	All Products
3.1.1.2.2 Optical Connector	All Products
3.1.1.3.2 Passive Optical Subsystems	All Products
3.1.1.3.4.1 Radio Antenna Systems	All Products
3.1.2.1 Enclosures	All Products
3.1.2.3 Conduit	All Products
3.2.1.1 Manual Cross Connect Systems	All Products
8.1.4 Mechanical and Electromechanical	All Products
8.3 Cable Assemblies	All Products

### Certification Structure: Multi-site

Certificate Expires: January 04, 2023

Certificate Reissued: September 03, 2021

Certificate Issued: January 05, 2021

Certified Since: August 8, 1994

Dr. Cem O. Onus  
Managing Director, Business Assurance  
DEKRA Certification, Inc.  
1120 Welsh Road, Suite 210  
North Wales, PA 19454 USA  
(215) 997-4519  
[dekra-certification.us](http://dekra-certification.us)





# CERTIFICATE ADDENDUM

Certificate Number: 151045.000

ADDENDUM Page One of Five

The Quality Management System and implementation of:

## CommScope, Inc.

meets the requirements of the standard:

## TL 9000 – H, S, V R6.2/R5.6

(Based on and including ISO 9001:2015)

Site Activities Legend:	HQ = Headquarters	MFG = Manufacturing	SER = Services, (Professional Services and/or Technical Support)
	HW DE= Hardware Development	REP = Repair	SC = Purchasing, Supplier Management, Manufacturing Support, Repair Support
	SW DE= Software Development	SAL = Sales, Marketing	

Site Address	Certification	Product Category	Site Activities
CommScope, Inc 1100 CommScope Place SE Hickory, NC 28602 United States	TL9000HSV	3.1.1.1.1, 3.1.1.1.2, 3.1.1.2.1, 3.1.1.2.2, 3.1.1.3.2, 3.1.1.3.4.1, 3.1.2.1, 3.1.2.3, 3.2.1.1, 3.2.5, 3.2.6.24.2.2.1, 6.2.5, 6.2.6.1, 8.1.4, 8.3	HQ (Virtual)
ARRIS Technology, Inc. 101 Tournament Dr. Horsham, PA 19044 United States	TL9000HSV	3.2.6.2, 6.2.6.1	HW & SW DE, SAL, SER, SC
ARRIS Technology, Inc. 900 Chelmsford St. Lowell, MA 01851 United States	TL9000HSV	3.2.5, 3.2.6.2, 6.2.5, 6.2.6.1	HW & SW DE, SAL, SER, SC

Certificate Expires: January 04, 2023  
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# CERTIFICATE ADDENDUM

Certificate Number: 151045.000  
ADDENDUM Page Two of Five

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**TL 9000 – H, S, V R6.2/R5.6**  
(Based on and including ISO 9001:2015)

<u>Site Address</u>	<u>Certification</u>	<u>Product Category</u>	<u>Site Activities</u>
ARRIS Technology, Inc. 6450 Sequence Drive San Diego, CA 92121 United States	TL9000HSV	3.2.6.2, 6.2.6.1	HW & SW DE, SAL, SER, SC
ARRIS Solutions, Inc. 2400 Ogden Ave., Suite 180 Lisle, IL 60532 United States	TL9000H	3.1.1.1.2, 3.2.5, 3.2.6.2, 6.2.5, 6.2.6.1, 8.3	SC, HW DE, SAL
ARRIS Technology, Inc. 2450/2500 Walsh Avenue Santa Clara, CA 95051 United States	TL9000SV	3.2.6.2	SER, SC
ARRIS Solutions, Inc. 4516 Seton Center Parkway Suite 185 Austin, Texas 78759	TL9000SV	4.2.2.1	SW DE, SER
ARRIS Technology (Shenzhen) Co., Ltd. South & East Wing, 4F, Block 2 Vision (Shenzhen) Business Park Shenzhen P.R. China	TL9000S	3.2.6.2	SW DE
ARRIS Technology (Hangzhou) Company Limited, Beijing Branch No. 1 Wang Jing East Road Chao Yang Dist. 100102 Beijing, P.R. China	TL9000V	3.2.5, 3.2.6.2, 6.2.5, 6.2.6.1	SER, SAL, SC
ARRIS Solutions UK Limited 710 Wharfedale Road IQ Winnersh Wokingham Berkshire RG41 5TP United Kingdom	TL9000V	3.2.5, 3.2.6.2, 6.2.5, 6.2.6.1	SAL, SER

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# CERTIFICATE ADDENDUM

Certificate Number: 151045.000  
ADDENDUM Page Three of Five

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

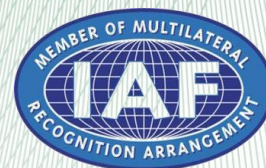
**TL 9000 – H, S, V R6.2/R5.6**  
**(Based on and including ISO 9001:2015)**

Site Address	Certification	Product Category	Site Activities
ARRIS de Mexico, SA de C.V. Via de la Innovacion # 402; CP 66628 Parque de Investigacion e Innovacion Tecnologica Apodaca Nuevo León; Mexico	TL9000HS	3.2.5, 3.2.6.2, 6.2.5, 6.2.6.1	HW & SW DE, REP
ARRIS Group de Mexico S.A. de C.V. Av. La Paz 11721 Parque Industrial Pacifico Tijuana, BC 22643 Mexico	TL9000H	3.1.1.3.4.1, 3.2.6.2, 3.2.5	MFG SC, REP
CommScope Technologies LLC 2601 Telecom Parkway Richardson, TX 75082 United States	TL9000H	3.1.1.3.4.1, 3.1.2.1	HW DE
CommScope Telecommunications (China) Co. Ltd. No. 68 Su Hong XI Lu Suzhou Industrial Park, Suzhou Jiangsu 215021 Peoples Republic of China	TL9000H	3.1.1.1.1, 3.1.1.2, 3.1.1.3.4.1, 8.3	HW DE, MFG
CommScope Connectivity (Suzhou) Co. Ltd. 77 Qiming Road, Suzhou Industrial Park Suzhou, Jiangsu 215121 Peoples Republic of China	TL9000H	3.1.1.3.2, 3.1.1.2.2, 3.1.1.1.2, 3.2.1.1., 8.3	HW DE, MFG
Andrew Wireless Systems GmbH Industriering 10 Buchdorf Bavaria 86675 GERMANY	TL9000H	3.1.1.3.4.1	HE DE, REP, MFG

Certificate Expires: January 04, 2023  
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# CERTIFICATE ADDENDUM

Certificate Number: 151045.000  
ADDENDUM Page Four of Five

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**TL 9000 – H, S, V R6.2/R5.6**  
**(Based on and including ISO 9001:2015)**

<u>Site Address</u>	<u>Certification</u>	<u>Product Category</u>	<u>Site Activities</u>
CommScope India Private Ltd Plot No. N-2, Verna Industrial Estate Phase IV, Verna - Salcette, GOA 403 722 INDIA	TL9000H	3.1.1.1.1, 3.1.1.1.2, 3.1.1.3.4.1, 8.3	HW DE, MFG
CommScope Italy srl Via Mengolina 20, Faenza Ravenna 48018 Italy	TL9000H	3.1.1.3.4.1	HW DE
Andrew Telecommunications de Reynosa, S. De R.L. de C. V. Ave. Industrial Reynosa Lote 2 al 5, Col Parque Industrial Reynosa, Reynosa Tamaulipas 88780 Mexico	TL9000H	3.1.1.3.4.1, 3.1.1.1.2, 3.1.2.1, 8.3	MFG
CommScope Corporation Mexico, S.A. de C.V. CCS Ave. Antonio J. Bermudez #550 Parque Ind. A. J. Bermudez Ciudad Juarez CHIH 32470 Mexico	TL9000H	3.1.1.3.2, 3.1.1.2.2, 3.1.2.3, 3.2.1.1, 8.3	HW DE, MFG
CommScope Corporation Mexico, S.A. de C.V. Santiago Troncoso No. 331, Cd. Juarez CHIH 32599 Mexico	TL9000H	3.1.1.3.2, 3.1.1.2.2, 3.1.2.3, 3.2.1.1, 8.3	MFG
ADC de Delicias S. De R.L. de C.V Boulevard Fernando Baeza #1301 Fraccionamiento San Marcos Ciudad Delicias Mexico	TL9000H	3.1.1.3.2, 3.1.1.2.2, 3.1.2.3, 3.2.1.1, 8.3	MFG
CommScope Technologies UK Ltd Lomond House, Grantsmuir John Smith Business Park Kirkcaldy, Fife KY2 6NA Scotland	TL9000H	8.1.4	HW DE, SAL

Certificate Expires: January 04, 2023  
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Certified Since: August 8, 1994



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# CERTIFICATE ADDENDUM

Certificate Number: 151045.000  
ADDENDUM Page Five of Five

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**TL 9000 – H, S, V R6.2/R5.6**  
**(Based on and including ISO 9001:2015)**

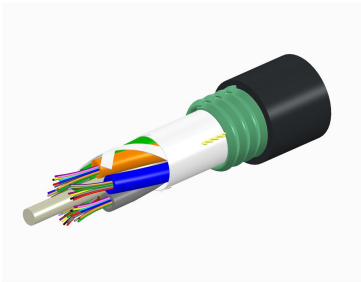
<u>Site Address</u>	<u>Certification</u>	<u>Product Category</u>	<u>Site Activities</u>
CommScope Inc of North Carolina 1130 Classic Rd Apex, NC 27539 United States	TL9000H	3.1.1.2.2	HW DE, SAL
CommScope Technologies LLC 140 Vista Centre Drive Forest, VA 24551 United States	TL9000H	3.1.1.3.4.1	HW DE, SW DE
CommScope Technologies LLC 19700 Janelia Farm Blvd Ashburn, VA 21047 United States	TL9000H	3.1.1.3.4.1	HW & SW DE, REP
CommScope Technologies LLC 11312 S. Pipeline Road Eules, TX 76040 United States	TL9000H	8.1.4	HW DE, MFG, SAL
CommScope Connectivity LLC 501 Shenandoah Drive Shakopee MN 55379 United States	TL9000	3.1.1.3.2, 3.1.1.2.2, 3.1.2.2.3, 3.2.1.1, 8.3	HW DE, SAL, SER, SC, SW DE
CommScope Inc of North Carolina 6519 CommScope Road, Catawba, NC 28609-0199 United States	TL9000	3.1.1.1.1, 3.1.1.1.2	HW DE, MFG, SAL
CommScope Inc of North Carolina 3642 US Hwy. 70 East Claremont NC 28610 United States	TL9000	3.1.1.1.1, 3.1.1.2.2, 3.1.1.2.1	HW DE, MFG, SAL

Certificate Expires: January 04, 2023  
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Fiber OSP cable, LazrSPEED® Single Jacket/Single Armor, Gel-Free, 6 fibers, Stranded Loose Tube, Multimode OM4, Feet jacket marking, Black jacket color

- Corrugated steel tape armor is strong yet flexible, providing additional crush and rodent protection

## Product Classification

Regional Availability	Asia   Australia/New Zealand   EMEA   Latin America   North America
Portfolio	CommScope®
Product Type	Fiber OSP cable
Product Series	D-LA

## General Specifications

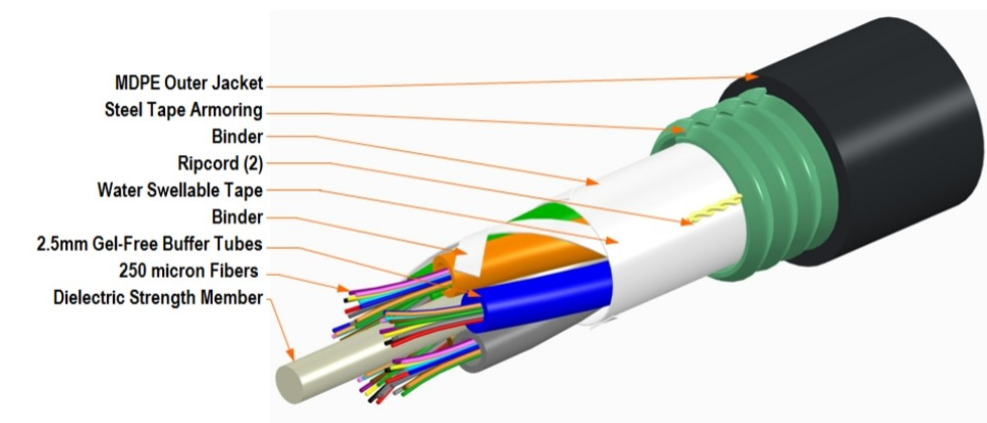
Armor Type	Corrugated steel
Cable Type	Stranded loose tube
Construction Type	Armored
Subunit Type	Gel-free
Filler, quantity	4
Jacket Color	Black
Jacket Marking	Feet
Subunit, quantity	1
Fibers per Subunit, quantity	6
Total Fiber Count	6

## Dimensions

Buffer Tube/Subunit Diameter	2.5 mm   0.098 in
Diameter Over Jacket	11.5 mm   0.453 in

## Representative Image





Material Specifications

Jacket Material

PE

Mechanical Specifications

Minimum Bend Radius, loaded	173 mm   6.811 in
Minimum Bend Radius, unloaded	115 mm   4.528 in
Tensile Load, long term, maximum	800 N   179.847 lbf
Tensile Load, short term, maximum	2700 N   606.984 lbf
Compression	22 N/mm   125.623 lb/in
Compression Test Method	FOTP-41   IEC 60794-1 E3
Flex	25 cycles
Flex Test Method	FOTP-104   IEC 60794-1 E6
Impact	4.41 N-m   39.032 in lb
Impact Test Method	FOTP-25   IEC 60794-1 E4
Strain	See long and short term tensile loads
Strain Test Method	FOTP-33   IEC 60794-1 E1
Twist	10 cycles
Twist Test Method	FOTP-85   IEC 60794-1 E7
Vertical Rise, maximum	740 m   2,427.822 ft

Optical Specifications

Fiber Type

OM4, LazrSPEED® 550 | OM4, LazrSPEED® 550

Environmental Specifications

Installation temperature	-30 °C to +70 °C (-22 °F to +158 °F)
Operating Temperature	-40 °C to +70 °C (-40 °F to +158 °F)
Storage Temperature	-40 °C to +75 °C (-40 °F to +167 °F)
Cable Qualification Standards	ANSI/ICEA S-87-640   EN 187105   Telcordia GR-20
Environmental Space	Aerial, lashed   Buried
Jacket UV Resistance	UV stabilized
Water Penetration	24 h
Water Penetration Test Method	FOTP-82   IEC 60794-1 F5

Environmental Test Specifications

Cable Freeze	-2 °C   28.4 °F
Cable Freeze Test Method	FOTP-98   IEC 60794-1 F15
Heat Age	-40 °C to +85 °C (-40 °F to +185 °F)
Heat Age Test Method	IEC 60794-1 F9
Low High Bend	-30 °C to +60 °C (-22 °F to +140 °F)
Low High Bend Test Method	FOTP-37   IEC 60794-1 E11
Temperature Cycle	-40 °C to +70 °C (-40 °F to +158 °F)
Temperature Cycle Test Method	FOTP-3   IEC 60794-1 F1

Packaging and Weights

Cable weight	110 kg/km   73.917 lb/kft
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Regulatory Compliance/Certifications

Agency	Classification
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system



Included Products

CS-5K-LT	– LazrSPEED® 550 OM4 Bend-Insensitive Multimode Fiber
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\* Footnotes



**Operating Temperature** Specification applicable to non-terminated bulk fiber cable

## LazrSPEED® 550 OM4 Bend-Insensitive Multimode Fiber

### LazrSPEED® 550

#### Product Classification

Portfolio	CommScope®
Product Type	Optical fiber

#### General Specifications

Cladding Diameter	125 µm
Cladding Diameter Tolerance	±0.8 µm
Cladding Non-Circularity, maximum	1 %
Coating Diameter (Colored)	254 µm
Coating Diameter (Uncolored)	245 µm
Coating Diameter Tolerance (Colored)	±7 µm
Coating Diameter Tolerance (Uncolored)	±10 µm
Coating/Cladding Concentricity Error, maximum	12 µm
Core Diameter	50 µm
Core Diameter Tolerance	±2.5 µm
Core/Clad Offset, maximum	1.5 µm
Proof Test	689.476 N/mm²   100000 psi

#### Mechanical Specifications

Macrobending, 15 mm Ø mandrel, 2 turns	0.20 dB @ 850 nm   0.50 dB @ 1,300 nm
Macrobending, 30 mm Ø mandrel, 2 turns	0.10 dB @ 850 nm   0.30 dB @ 1,300 nm
Macrobending, 37.5 mm Ø mandrel, 100 turns	0.50 dB @ 1,300 nm   0.50 dB @ 850 nm
Coating Strip Force, maximum	8.9 N   2.001 lbf
Coating Strip Force, minimum	1.3 N   0.292 lbf
Dynamic Fatigue Parameter, minimum	18

# CS-5K-LT

## Optical Specifications

<b>Numerical Aperture</b>	0.2
<b>Numerical Aperture Tolerance</b>	±0.015
<b>Point Defects, maximum</b>	0.15 dB
<b>Zero Dispersion Slope, maximum</b>	0.105 ps/[km-nm-nm]
<b>Zero Dispersion Wavelength, maximum</b>	1316 nm
<b>Zero Dispersion Wavelength, minimum</b>	1297 nm

## Optical Specifications, Wavelength Specific

<b>1 Gbps Ethernet Distance</b>	1,110 m @ 850 nm   600 m @ 1,300 nm
<b>10 Gbps Ethernet Distance</b>	550 m @ 850 nm
<b>Attenuation, maximum</b>	1.00 dB/km @ 1,300 nm   3.00 dB/km @ 850 nm
<b>Backscatter Coefficient</b>	-68.0 dB @ 850 nm   -75.7 dB @ 1,300 nm
<b>Bandwidth, Laser, minimum</b>	4,700 MHz-km @ 850 nm   500 MHz-km @ 1,300 nm
<b>Bandwidth, OFL, minimum</b>	3,500 MHz-km @ 850 nm   500 MHz-km @ 1,300 nm
<b>Differential Mode Delay</b>	0.70 ps/m @ 850 nm   0.88 ps/m @ 1,300 nm
<b>Differential Mode Delay Note</b>	Superior to TIA-492AAAC and IEC 60793-2-10 at 850 nm
<b>Index of Refraction</b>	1.479 @ 1,300 nm   1.483 @ 850 nm
<b>Standards Compliance</b>	IEC 60793-2-10, type A1a.3a   IEC 60793-2-10, type A1a.3b   TIA-492AAAD (OM4)

## Environmental Specifications

<b>Heat Aging, maximum</b>	0.20 dB/km @ 85 °C
<b>Temperature Dependence, maximum</b>	0.1 dB/km
<b>Temperature Humidity Cycling, maximum</b>	0.2 dB/km
<b>Water Immersion, maximum</b>	0.20 dB/km @ 23 °C

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system



# CS-5K-LT

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\* Footnotes

<b>Temperature Dependence, maximum</b>	Temperature dependence is conducted at -60 °C to +85 °C (-76 °F to +185 °F)
<b>Temperature Humidity Cycling, maximum</b>	Temperature humidity cycling is conducted at -10 °C to +85 °C (+14 °F to +185 °F) up to 95% relative humidity





August 2, 2016

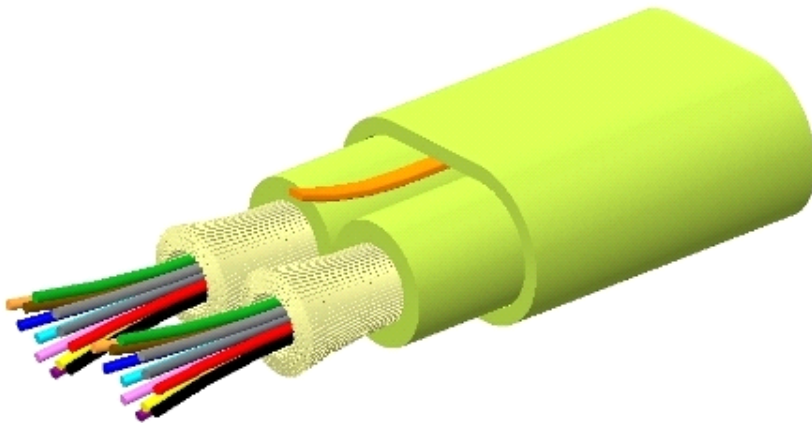
## CommScope WBMMF Testing Certified by Intertek

*-Believed to be industry's first confirmed successful test of wavelengths beyond 850 nm-*

HICKORY, N.C.--(BUSINESS WIRE)-- [Wideband multimode fiber \(WBMMF\)](#) is an innovative solution allowing IT and data center managers to build cost effective infrastructure that can support bandwidth needs today and in the future.

This Smart News Release features multimedia. View the full release here:

<http://www.businesswire.com/news/home/20160802005263/en/>



Intertek, a leading total quality assurance provider to industries worldwide, recently certified CommScope's WBMMF testing facility in Richardson, Texas for its measurement setup and technique. (Photo: Business Wire)

"This testing and certification validates CommScope's commitment to its state-of-the-art DMD testing capability that is critical for new product development," said David Brown, senior vice president, Research and Development, CommScope. "With Intertek as our witness, our certified testing will increase customer confidence in our laboratory measurements."

Brown added the certification allows CommScope to continue developing its innovative WBMMF solutions. This, coupled with transceivers using wavelength division multiplexing and/or pulse-amplitude modulation technology, provides a path for CommScope customers to grow their fiber throughput capacity from 10G to 100G and beyond with maximum fiber reach and minimum fiber count, enabling them to cost-effectively keep pace with the bandwidth explosion.

"Our customers and the industry expect leadership from CommScope and we are doing that by providing innovative, certified solutions that adhere to important industry standards," Brown said.

"Intertek is pleased to provide its expertise in certifying standards compliance to the DMD bench at CommScope's facility," said Antoine Pelletier, project engineer, Intertek. "CommScope's DMD bench met the measurement standard's requirements and properly graded the performance of fibers used in CommScope's [LazrSPEED®](#) cables with respect to the TIA-492 series requirements."

Click [here](#) to download the Intertek witness report.

### Related Blog Posts and Videos:

[The Impact of SWDM over Multimode Fiber](#)

[How to Achieve High Efficiency in Connectivity](#)

[The Next Generation of Multimode Fiber](#)

[Intertek](#), a leading total quality assurance provider to industries worldwide, [recently certified](#) CommScope's WBMMF testing facility in Richardson, Texas for its measurement setup and technique stating "it satisfies the current [Telecommunication Industry Association's](#) (TIA) standard (TIA-455-220-A)."

Intertek witnessed CommScope's differential mode delay (DMD) testing of WBMMF at 850, 880, 910 and 953 nm. This marks what CommScope believes to be the industry's first confirmed successful test of wavelengths beyond 850 nm, an important step in verifying fiber performance for emerging shortwave wavelength division multiplexing systems. The fibers also met the TIA-492AAAC, TIA-492AAD and TIA-492AAAE standards, Intertek stated.

[Next Generation Multimode Fiber Gains Support](#)

[The Arrival of WideBand Multimode Fiber](#)

[The Widening Horizon for Multimode Fiber in Buildings and Data Centers](#)

[Ethernet, the Road Ahead](#)

[VIDEO: LazrSPEED WideBand Multimode Fiber by CommScope](#)

[VIDEO: Wideband Multimode Fiber - What is it and why does it make sense?](#)

[VIDEO: CommScope Engineering Fellow talks next-gen fiber](#)

*LazrSPEED is a registered trademark of CommScope, Inc.*

## **About CommScope**

[CommScope](#) (NASDAQ: COMM) helps companies around the world design, build and manage their wired and wireless networks. Our vast portfolio of network infrastructure includes some of the world's most robust and innovative wireless and fiber optic solutions. Our talented and experienced global team is driven to help customers increase bandwidth; maximize existing capacity; improve network performance and availability; increase energy efficiency; and simplify technology migration. You will find our solutions in the largest buildings, venues and outdoor spaces; in data centers and buildings of all shapes, sizes and complexity; at wireless cell sites; in telecom central offices and cable headends; in FTTx deployments; and in airports, trains, and tunnels. Vital networks around the world run on CommScope solutions.

Follow us on [Twitter](#), [LinkedIn](#) and [Instagram](#), and like us on [Facebook](#).

Sign up for our [press releases](#) and [blog posts](#).

This press release includes forward-looking statements that are based on information currently available to management, management's beliefs, as well as on a number of assumptions concerning future events. Forward-looking statements are not a guarantee of performance and are subject to a number of uncertainties and other factors, which could cause the actual results to differ materially from those currently expected. In providing forward-looking statements, the company does not intend, and is not undertaking any obligation or duty, to update these statements as a result of new information, future events or otherwise.

View source version on [businesswire.com](#): <http://www.businesswire.com/news/home/20160802005263/en/>

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Source: CommScope

News Provided by Acquire Media

# CERTIFICATE

Certificate Number: 151045.000

TLID: TL1786

With Eight Page Addendum

The Quality Management System and implementation of:

## CommScope, Inc.

With Virtual Central Function at:

1100 CommScope Place SE

Hickory, NC 28602

United States

meets the requirements of the standard:

## TL 9000 – H, S, V R6.3/R5.7 (Based on and including ISO 9001:2015)

### Scope:

The sales, marketing, design, manufacture, test, repair, support, service, and distribution of telecommunications products, components, and services for the telecommunications, wireless, and broadcast networks industries

Product Categories	Products
3.2.5 Fiber to the User	ASWXXXX, OLT (GPON)
3.2.6 Video Transmission Equipment	EQAM Products (APEX, SFP), Switched Digital Video and Resource Mgmt, Network Encryption (NE), ALOHA Interactive (ARPD, ADM, SDM), Cablevista Edge Decoder, Conditional Access Products
6.2.5 Passive Optical Network Termination Units	ONT-1xxxx, ONT1xxx
3.1.1.1.1 Metallic Conductor Cable	All Products
3.1.1.1.2 Metallic Connectors	All Products
3.1.1.2.1 Fiber Optic Cable	All Products
3.1.1.2.2 Optical Connector	All Products
3.1.1.3.2 Passive Optical Transmission Subsystems	All Products
3.1.1.3.4 Fixed Antenna Systems	All Products
3.1.2.1 Enclosures	All Products
3.1.2.3 Conduits	All Products
3.2.1.1 Manual Cross Connect Systems	All Products
8.1.4 Electromechanical Components	All Products
8.3 Cable Assemblies	All Products

**Certification Structure:** Multi-site

Certificate Expires: January 04, 2026

Certificate Issued: January 05, 2023

Certified Since: August 08, 1994



Dr. Cem O. Onus  
Managing Director

DEKRA Certification, Inc.

1945 The Exchange SE #300

Atlanta, GA 30339 USA

(215) 997-4519

[dekra-certification.us](http://dekra-certification.us)





# CERTIFICATE ADDENDUM

Certificate Number: 151045.000

ADDENDUM Page One of Eight

The Quality Management System and implementation of:

## CommScope, Inc.

meets the requirements of the standard:

## TL 9000 – H, S, V R6.3/R5.7

(Based on and including ISO 9001:2015)

<b>Site Activities Legend:</b>	HQ = Headquarters	MFG = Manufacturing	SER = Services, (Professional Services and/or Technical Support)
	HW DE= Hardware Development	REP = Repair	SC = Purchasing, Supplier Management, Manufacturing Support, Repair Support
	SW DE= Software Development	SAL = Sales, Marketing	

Site Address	Certification	Product Category	Site Activities
CommScope, Inc 1100 CommScope Place SE Hickory, NC 28602 United States	TL9000HSV	3.1.1.1.1, 3.1.1.1.2, 3.1.1.2.1, 3.1.1.2.2, 3.1.1.3.2, 3.1.1.3.4, 3.1.2.1, 3.1.2.3, 3.2.1.1, 3.2.5, 3.2.6, 6.2.5, 8.1.4, 8.3	HQ (Virtual)
ARRIS Technology, Inc. 900 Chelmsford St. Lowell, MA 01851 United States	TL9000HSV	3.2.5, 3.2.6, 6.2.5, 3.1.1.3.4	HW & SW DE, SER, SC
ARRIS Technology, Inc. 6450 Sequence Drive San Diego, CA 92121 United States	TL9000SV	3.2.6	SW DE, SER
ARRIS Solutions, Inc. 2400 Ogden Ave., Suite 180 Lisle, IL 60532 United States	TL9000H	3.1.1.1.2, 3.2.5, 3.2.6, 6.2.5, 8.3	HW DE, SAL, SC

Certificate Expires: January 04, 2026

Certificate Issued: January 05, 2023

Certified Since: August 08, 1994



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# CERTIFICATE ADDENDUM

Certificate Number: 151045.000  
ADDENDUM Page Two of Eight

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**TL 9000 – H, S, V R6.3/R5.7**  
**(Based on and including ISO 9001:2015)**

<u>Site Address</u>	<u>Certification</u>	<u>Product Category</u>	<u>Site Activities</u>
ARRIS STB de Mexico, SA de C.V. Via de la Innovacion # 402; CP 66628 Parque de Investigacion e Innovacion Tecnologica Apodaca Nuevo León; Mexico	TL9000HSV	3.2.5, 3.2.6, 6.2.5	HW & SW DE, REP
ARRIS Group de Mexico S.A. de C.V. Av. La Paz 11721 Parque Industrial Pacifico Tijuana, BC 22643 Mexico	TL9000HV	3.1.1.3.4, 3.2.6, 3.2.5	MFG SC, REP
CommScope Technologies LLC 2601 Telecom Parkway Richardson, TX 75082 United States	TL9000H	3.1.1.3.4, 3.1.2.1	HW DE, SER
CommScope Telecommunications (China) Co. Ltd. No. 68 Su Hong XI Lu Suzhou Industrial Park, Suzhou Jiangsu 215021 Peoples Republic of China	TL9000H	3.1.1.1.1, 3.1.1.1.2, 3.1.1.3.4, 8.3	HW DE, MFG, SC,
CommScope Connectivity (Suzhou) Co. Ltd. 77 Qiming Road, Suzhou Industrial Park Suzhou, Jiangsu 215121 Peoples Republic of China	TL9000H	3.1.1.3.2, 3.1.1.2.2, 3.1.1.1.2, 3.2.1.1, 8.3	MFG, SC

Certificate Expires: January 04, 2026  
Certificate Issued: January 05, 2023  
Certified Since: August 08, 1994



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# CERTIFICATE ADDENDUM

Certificate Number: 151045.000  
ADDENDUM Page Three of Eight

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**TL 9000 – H, S, V R6.3/R5.7**  
**(Based on and including ISO 9001:2015)**

<u>Site Address</u>	<u>Certification</u>	<u>Product Category</u>	<u>Site Activities</u>
Andrew Wireless Systems GmbH Industriering 10 Buchdorf Bavaria 86675 GERMANY	TL9000HV	3.1.1.3.4	HW DE, REP, MFG
CommScope India Private Ltd Plot No. N-2, Verna Industrial Estate Phase IV, Verna - Salcette, GOA 403 722 INDIA	TL9000H	3.1.1.1.1, 3.1.1.1.2, 3.1.1.3.4, 8.3	HW DE, MFG, SC
CommScope Italy srl Via Mengolina 20, Faenza Ravenna 48018 Italy	TL9000H	3.1.1.3.4	HW DE
Andrew Telecommunications de Reynosa, S. De R.L. de C. V. Ave. Industrial Reynosa Lote 2 al 5, Col Parque Industrial Reynosa, Reynosa Tamaulipas 88780 Mexico	TL9000H	3.1.1.3.4, 3.1.1.1.2, 3.1.2.1, 8.3	MFG
CommScope Corporation Mexico, S.A. de C.V. CCS Ave. Antonio J. Bermudez #550 Parque Ind. A. J. Bermudez Ciudad Juarez CHIH 32470 Mexico	TL9000H	3.1.1.3.2, 3.1.1.2.2, 3.1.2.3, 3.2.1.1, 8.3	HW DE, MFG
CommScope Corporation Mexico, S.A. de C.V. Santiago Troncoso No. 331, Cd. Juarez CHIH 32599 Mexico	TL9000H	3.1.1.3.2, 3.1.1.2.2, 3.1.2.3, 3.2.1.1, 8.3	MFG
ADC de Delicias S. De R.L. de C.V Boulevard Fernando Baeza #1301 Fraccionamiento San Marcos Ciudad Delicias Mexico	TL9000H	3.1.1.3.2, 3.1.1.2.2, 3.1.2.3, 3.2.1.1, 8.3	MFG

Certificate Expires: January 04, 2026  
Certificate Issued: January 05, 2023  
Certified Since: August 08, 1994



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# CERTIFICATE ADDENDUM

Certificate Number: 151045.000  
ADDENDUM Page Four of Eight

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**TL 9000 – H, S, V R6.3/R5.7**  
**(Based on and including ISO 9001:2015)**

<u>Site Address</u>	<u>Certification</u>	<u>Product Category</u>	<u>Site Activities</u>
CommScope Technologies UK Ltd Lomond House, Grantsmuir John Smith Business Park Kirkcaldy, Fife KY2 6NA Scotland	TL9000H	8.1.4	HW DE, SAL
CommScope Inc of North Carolina 1130 Classic Rd Apex, NC 27539 United States	TL9000H	3.1.1.2.2	HW DE, SAL
CommScope Technologies LLC 11312 S. Pipeline Road Euless, TX 76040 United States	TL9000H	8.1.4	HW DE, MFG, SAL
CommScope Connectivity LLC 501 Shenandoah Drive Shakopee MN 55379 United States	TL9000HSV	3.1.2.3 3.1.1.2.2, 3.1.1.3.2, 3.2.1.1, 8.3	HW DE, SAL, SER, SC,
CommScope Inc of North Carolina 6519 CommScope Road, Catawba, NC 28609-0199 United States	TL9000H	3.1.1.1.1, 3.1.1.1.2	HW DE, MFG, SAL
CommScope Inc of North Carolina 3642 US Hwy. 70 East Claremont NC 28610 United States	TL9000H	3.1.1.1.1, 3.1.1.2.1	HW DE, MFG, SAL

Certificate Expires: January 04, 2026  
Certificate Issued: January 05, 2023  
Certified Since: August 08, 1994



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# CERTIFICATE ADDENDUM

Certificate Number: 151045.000  
TLID: TL1786  
ADDENDUM Page Five of Eight

The Quality Management System and implementation of:

**CommScope, Inc.**

With site:

**CommScope Connectivity (Suzhou) Co. Ltd.**

77 Qiming Road, Suzhou Industrial Park

Suzhou, Jiangsu 215121

Peoples Republic of China

meets the requirements of the standard:

## TL 9000 – H R6.3/R5.7 (Based on and including ISO 9001:2015)

The validity of this certificate depends on the validity of the main certificate.

### Scope:

Manufacture metallic connectors, fiber optical jumpers and connectors, passive optical transmission sub - systems, enclosures, cable assemblies, fiber connection enclosures and communication cabinets

Product Categories	
3.1.1.1.2	Metallic Connectors
3.1.1.2.2	Optical Connector
3.1.1.3.2	Passive Optical Subsystems
3.2.1.1	Manual Cross Connect Systems
8.3	Cable Assemblies

**Certification Structure:** Multi-site

Certificate Expires: January 04, 2026  
Certificate Issued: January 05, 2023  
Certified Since: August 08, 1994



Dr. Cem O. Onus  
Managing Director

DEKRA Certification, Inc.  
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[dekra-certification.us](http://dekra-certification.us)





# 证书附录

证书编号: 151045.000

TLID: TL1786

附录第 6 页, 共 8 页

质量管理体系和实施:

**CommScope, Inc.**

其场所:

**康普通联通信 (苏州) 有限公司**

苏州工业园区启明路 77 号

江苏苏州 215121

中华人民共和国

符合以下标准要求:

**TL 9000 – H R6.3/R5.7**  
**(基于并包括 ISO 9001:2015)**

本证书的有效性取决于主证书的有效性。

**范围:**

金属连接器, 光纤跳线及连接器, 无源光传输子系统, 附件, 电缆组件, 光缆接头盒, 通讯机柜的生产

产品类别	
3.1.1.1.2	金属连接器
3.1.1.2.2	光学连接器
3.1.1.3.2	无源光学子系统
3.2.1.1	手动交叉连接系统
8.3	电缆组件

**认证结构: 多场所**

证书有效期: 2026.1.4

发证日期: 2023.1.5

首次发证日期: 2021.1.5



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Managing Director

DEKRA Certification, Inc.

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(215) 997-4519

[dekra-certification.us](http://dekra-certification.us)





# CERTIFICATE ADDENDUM

Certificate Number: 151045.000  
TLID: TL1786  
ADDENDUM Page Seven of Eight

The Quality Management System and implementation of:

**CommScope, Inc.**

With site:

**CommScope Telecommunications (China) Co. Ltd.**

No. 68 Su Hong Xi Lu Suzhou Industrial Park,  
Suzhou Jiangsu 215021  
Peoples Republic of China

meets the requirements of the standard:

## TL 9000 – H R6.3/R5.7 (Based on and including ISO 9001:2015)

The validity of this certificate depends on the validity of the main certificate.

### Scope:

制造金属连接器、光纤跳线和连接器、无源光传输子系统、外壳、电缆组件、光纤连接外壳和通信机柜 3.1.1.1.1, 3.1.1.1.2, 3.1.1.3.4, 8.3

Product Categories	
3.1.1.1.1	Metallic Conductor Cable
3.1.1.1.2	Metallic Connectors
3.1.1.3.4	Fixed Antenna Systems
8.3	Cable Assemblies

**Certification Structure:** Multi-site

Certificate Expires: January 04, 2026  
Certificate Issued: January 05, 2023  
Certified Since: August 08, 1994



Dr. Cem O. Onus  
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# 证书附录

证书编号: 151045.000

TLID: TL1786

附录第 8 页, 共 8 页质量管理体系和实施:

**CommScope, Inc.**

其场所:

**康普电信 (中国) 有限公司**

苏州工业园区苏虹西路 68 号,

江苏苏州 215021

中华人民共和国

符合以下标准要求:

## TL 9000 – H R6.3/R5.7 (基于并包括 ISO 9001:2015)

本证书的有效性取决于主证书的有效性。

### 范围:

金属连接器 · 光纤跳线及连接器 · 无源光传输子系统 · 附件 · 电缆组件 · 光缆接头盒 · 通讯机柜的生产

产品类别	
3.1.1.1.1	金属导体电缆
3.1.1.1.2	金属连接器
3.1.1.3.4	固定天线系统
8.3	电缆组件

### 认证结构: 多站点

证书有效期: 2026.1.4

发证日期: 2023.1.5

首次发证日期: 2021.1.5



Dr. Cem O. Onus  
Managing Director

DEKRA Certification, Inc.

1945 The Exchange SE #300

Atlanta, GA 30339 USA

(215) 997-4519

[dekra-certification.us](https://dekra-certification.us)



# Certificate of Registration

## ENVIRONMENTAL MANAGEMENT SYSTEM - ISO 14001:2015

This is to certify that:

CommScope, Inc. of North Carolina  
1100 CommScope Place SE  
Hickory  
North Carolina  
28603-0339  
USA


Holds Certificate No:

**EMS 648387**

and operates an Environmental Management System which complies with the requirements of ISO 14001:2015 for the following scope:

The environmental management system to control the risks associated with the manufacture, distribution, field support and central function of telecommunication products and services.

For and on behalf of BSI:

  
Carlos Pitanga, Chief Operating Officer Assurance – Americas

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 1 of 5



...making excellence a habit.™



Certificate No: **EMS 648387**

Location	Registered Activities
Andrew Telecommunications de Reynosa S. de R.L. de C.V. Av. Industrial Reynosa Lte 2 al 5 Parque Industrial Center Reynosa Tamaulipas 88780 Mexico	Manufacture and distribution of telecommunication products including antenna and cable.
CommScope Asia (Suzhou) Technologies Co., Ltd. EPZ II, 77 Qiming Road Suzhou Industrial Park Suzhou Jiangsu 215121 China	Manufacture and distribution of telecommunication products, including cable.
Andrew Telecommunications India Pvt. Ltd. Plot No. N-2, Phase IV Verna Industrial Estate Verna Salcette Goa 403 722 India	Manufacture and distribution of telecommunication products, including antenna and cable.
CommScope EMEA Ltd. Corke Abbey Avenue Bray County Dublin A98FY03 Ireland	Manufacture and distribution of telecommunication products, including cable and connectors.
CommScope Telecommunications (China) Co., Ltd. 68 West Su Hong Xi Lu Suzhou Industrial Park Suzhou Jiangsu 215021 China	Manufacture and distribution of telecommunication products, including antenna and cables.

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 2 of 5

This certificate remains the property of BSI and shall be returned immediately upon request.

An electronic certificate can be authenticated [online](http://www.bsigroup.com/ClientDirectory). Printed copies can be validated at [www.bsigroup.com/ClientDirectory](http://www.bsigroup.com/ClientDirectory). To be read in conjunction with the scope above or the attached appendix.

Information and Contact: BSI, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP. Tel: + 44 345 080 9000  
BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.  
A Member of the BSI Group of Companies.

Certificate No: **EMS 648387**

Location	Registered Activities
Andrew Wireless Systems GmbH Industriering 10 Buchdorf 86675 Germany	Manufacture and distribution of telecommunication products, including amplifiers and antenna systems.
CommScope, Inc. of North Carolina 1100 CommScope Place SE Hickory North Carolina 28603-0339 USA	Corporate headquarters responsible for management system oversight of all locations listed on this certificate.
CommScope Inc. 6519 CommScope Road Catawba North Carolina 28609-0199 USA	Manufacture and distribution of telecommunication products, including cable.
CommScope Inc. 3642 US Hwy 70 East Claremont North Carolina 28610-0879 USA	Manufacture and distribution of telecommunication products, including cable.
CommScope Czech Republic s.r.o. Turanka 98B Brno 62700 Czech Republic	Manufacture and distribution of telecommunication products, including connectors and terminations.
CommScope Inc. of North Carolina 1100 CommScope Place SE Hickory North Carolina 28603-0339 USA	Customer care, facility maintenance, and administrative functions.
ADC de Delicias, S. de R.L. de C.V. Blvd. Fernando Baeza No. 1301 Sur Delicias Chihuahua 33000 Mexico	Manufacturing and distribution of telecommunication products.

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 3 of 5

This certificate remains the property of BSI and shall be returned immediately upon request.

An electronic certificate can be authenticated [online](https://www.bsigroup.com/ClientDirectory). Printed copies can be validated at [www.bsigroup.com/ClientDirectory](https://www.bsigroup.com/ClientDirectory)

To be read in conjunction with the scope above or the attached appendix.

Information and Contact: BSI, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP. Tel: + 44 345 080 9000

BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.

A Member of the BSI Group of Companies.

Certificate No: **EMS 648387**

Location	Registered Activities
ADC de Juarez S. de R.L. de C.V. Parque Industrial Antonio J Bermudez Ciudad Juarez Chihuahua 32470 Mexico	Manufacturing and distribution of telecommunication products.
CommScope Connectivity Belgium bvba Diestsesteenweg 692 Kessel-lo 3010 Belgium	Manufacture and distribution of telecommunication products.
CommScope Technologies de Juarez S. de R.L. de C.V. Santiago Troncoso 331 Praderas del Sur, Ciudad Juarez Chihuahua 32575 Mexico	Manufacture of Fiber Optic Splice Closures (FOSC), Fiber Guide Systems (FGS), Hardened Connectivity and Molding-Gel Filling, including: plastic injection molding, plastic extrusion, plastic and metal machining, and assembly operations.
CommScope Connectivity UK Limited Unit 1 Kinmel Park Bodelwyddan Rhyl, Denbighshire LL18 5TZ United Kingdom	Fibre optic cable manufacturing, termination and design of other telecommunication products and services.
CommScope 11312 S. Pipeline Road Eules Texas 76040 USA	Manufacture, distribution, field support and central function of telecommunication products.
ARRIS GROUP DE MEXICO SA DE CV Av. De la Paz, #11721 Parque Industrial Pacifico Tijuana Baja California 22643 Mexico	Manufacture, repair, support, repair service, distribution of products and components for telecommunications that provide integrated solutions for voice, video and data through the processes of SMT, manual and mechanical assembly, soldering (manual, selective, printed, wave) electrical testing and packaging.

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 4 of 5

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To be read in conjunction with the scope above or the attached appendix.

Information and Contact: BSI, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP. Tel: + 44 345 080 9000

BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.

A Member of the BSI Group of Companies.



Certificate No: **EMS 648387**

Location	Registered Activities
CommScope Design & Integration UK Ltd Unit 5 & 6, Eden Business Park Edenhouse Drive Old Malton Malton YO17 6AE United Kingdom	Manufacture and distribution of telecommunications products including cabinets.
Arris Indústria Eletrônica do Brasil Ltda. CNPJ: 09.154.836/0001-15 Avenida Torquato Tapajós, 9475 Tarumã Manaus Amazonas 69041-025 Brasil	Manufacturer and distribution of Receivers, Television signal Decoders and Modulator/Router.
CommScope Design and Integration UK Ltd. Lovell House, 412 The Quadrant Birchwood Park Warrington WA3 6FW United Kingdom	Telecommunications project management, site surveys, installations commissioning and rigging.

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

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A Member of the BSI Group of Companies.

# Certificate of Registration

OCCUPATIONAL HEALTH & SAFETY MANAGEMENT SYSTEM - ISO 45001:2018

This is to certify that:

CommScope, Inc. of North Carolina  
1100 CommScope Place SE  
Hickory  
North Carolina  
28603-0339  
USA


Holds Certificate No:

**OHS 650243**

and operates an Occupational Health and Safety Management System which complies with the requirements of ISO 45001:2018 for the following scope:

The occupational health & safety management system to control the hazards associated with the manufacture, distribution, field support and central function of telecommunication products and services.

For and on behalf of BSI:

  
Carlos Pitanga, Chief Operating Officer Assurance – Americas

Original Registration Date: 2016-04-04

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 1 of 5



...making excellence a habit.™

Certificate No: **OHS 650243**

Location	Registered Activities
Andrew Telecommunications de Reynosa S. de R.L. de C.V. Av. Industrial Reynosa Lte 2 al 5 Parque Industrial Center Reynosa Tamaulipas 88780 Mexico	Manufacture and distribution of telecommunication products, including antenna and cable.
CommScope Asia (Suzhou) Technologies Co., Ltd. EPZ II, 77 Qiming Road Suzhou Industrial Park Suzhou Jiangsu 215121 China	Manufacture and distribution of telecommunication products, including cable.
Andrew Telecommunications India Pvt. Ltd. Plot No. N-2, Phase IV Verna Industrial Estate Verna Salcette Goa 403 722 India	Manufacture and distribution of telecommunication products, including antenna and cable.
CommScope EMEA Ltd. Corke Abbey Avenue Bray County Dublin A98FY03 Ireland	Manufacture and distribution of telecommunication products, including cable and connectors.
CommScope Telecommunications (China) Co., Ltd. 68 West Su Hong Xi Lu Suzhou Industrial Park Suzhou Jiangsu 215021 China	Manufacture and distribution of telecommunication products, including antenna and cables.

Original Registration Date: 2016-04-04

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 2 of 5

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Information and Contact: BSI, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP. Tel: + 44 345 080 9000  
BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.  
A Member of the BSI Group of Companies.



Certificate No: **OHS 650243**

Location	Registered Activities
Andrew Wireless Systems GmbH Industriering 10 Buchdorf 86675 Germany	Manufacture and distribution of telecommunication products, including amplifiers and antenna systems.
CommScope, Inc. of North Carolina 1100 CommScope Place SE Hickory North Carolina 28603-0339 USA	Corporate headquarters responsible for management system oversight of all locations listed on this certificate.
CommScope Inc. 6519 CommScope Road Catawba North Carolina 28609-0199 USA	Manufacture and distribution of telecommunication products, including cable.
CommScope Inc. 3642 US Hwy 70 East Claremont North Carolina 28610-0879 USA	Manufacture and distribution of telecommunication products, including cable.
CommScope Czech Republic s.r.o. Turanka 98B Brno 62700 Czech Republic	Manufacture and distribution of telecommunication products, including connectors and terminations.
CommScope Inc. of North Carolina 1100 CommScope Place SE Hickory North Carolina 28603-0339 USA	Customer care, facility maintenance, and administrative functions.
ADC de Delicias, S. de R.L. de C.V. Blvd. Fernando Baeza No. 1301 Sur Delicias Chihuahua 33000 Mexico	Manufacturing and distribution of telecommunication products.

Original Registration Date: 2016-04-04

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 3 of 5

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BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.

A Member of the BSI Group of Companies.

Certificate No: **OHS 650243**

Location	Registered Activities
ADC de Juarez S. de R.L. de C.V. Parque Industrial Antonio J Bermudez Ciudad Juarez Chihuahua 32470 Mexico	Manufacturing and distribution of telecommunication products.
CommScope Connectivity Belgium bvba Diestsesteenweg 692 Kessel-lo 3010 Belgium	Manufacture and distribution of telecommunication products.
CommScope Technologies de Juarez S. de R.L. de C.V. Santiago Troncoso 331 Praderas del Sur, Ciudad Juarez Chihuahua 32575 Mexico	Manufacture of Fiber Optic Splice Closures (FOSC), Fiber Guide Systems (FGS), Hardened Connectivity and Molding-Gel Filling, including: plastic injection molding, plastic extrusion, plastic and metal machining, and assembly operations.
CommScope Connectivity UK Limited Unit 1 Kinmel Park Bodelwyddan Rhyl, Denbighshire LL18 5TZ United Kingdom	Fibre optic cable manufacturing, termination and design of other telecommunication products and services.
CommScope 11312 S. Pipeline Road Eules Texas 76040 USA	Manufacture, distribution, field support and central function of telecommunication products.
ARRIS GROUP DE MEXICO SA DE CV Av. De la Paz, #11721 Parque Industrial Pacifico Tijuana Baja California 22643 Mexico	Manufacture, repair, support, repair service, distribution of products and components for telecommunications that provide integrated solutions for voice, video and data through the processes of SMT, manual and mechanical assembly, soldering (manual, selective, printed, wave) electrical testing and packaging.

Original Registration Date: 2016-04-04

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Certificate No: **OHS 650243**

Location	Registered Activities
CommScope Design & Integration UK Ltd Unit 5 & 6, Eden Business Park Edenhouse Drive Old Malton Malton YO17 6AE United Kingdom	Manufacture and distribution of telecommunications products including cabinets.
Arris Indústria Eletrônica do Brasil Ltda. CNPJ: 09.154.836/0001-15 Avenida Torquato Tapajós, 9475 Tarumã Manaus Amazonas 69041-025 Brasil	Manufacturer and distribution of Receivers, Television signal Decoders and Modulator/Router.
CommScope Design and Integration UK Ltd. Lovell House, 412 The Quadrant Birchwood Park Warrington WA3 6FW United Kingdom	Telecommunications project management, site surveys, installations commissioning and rigging.

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Latest Revision Date: 2022-04-21

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Expiry Date: 2025-03-14

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BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.  
A Member of the BSI Group of Companies.



# CERTIFICATE

Certificate Number: 111045.000  
Including Five Page Addendum

The Quality System of:

**CommScope, Inc.**

With Virtual Central Function at:  
1100 CommScope Place SE  
Hickory, NC 28602  
United States

## ISO 9001:2015

### Scope:

The sales, marketing, design, manufacture, test, repair, support, service, and distribution of telecommunications products, components, and services for the telecommunications, wireless, and broadcast networks industries

Certificate Expires: January 09, 2023  
Certificate Reissued: September 03, 2021  
Certificate Issued: January 10, 2020  
Certified Since: January 10, 2001

Business Segments	Exceptions
Home Networks	None
Broadband Networks	None
Venue and Campus Networks	ICX Products
Outdoor Wireless Networks	None



Dr. Cem O. Onus  
Managing Director  
DEKRA Certification, Inc.  
1120 Welsh Road, Suite 210  
North Wales, PA 19454 USA  
(215) 997-4519  
<http://www.dekra.us/en/audit>





# CERTIFICATE ADDENDUM

Certificate Number: 111045.000  
ADDENDUM Page One of Five

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**ISO 9001:2015**

<b>Site Activities Legend:</b>	HQ = Headquarters	MFG = Manufacturing	SER = Services (Professional Services and/or Technical Support)
	HW DE= Hardware Development	REP = Repair	SC = Purchasing, Supplier Management, Manufacturing Support, Repair Support
	SW DE= Software Development	SAL = Sales, Marketing	DIST = Distribution

Site Address	Site Activities
CommScope Inc 1100 CommScope Place SE Hickory, NC 28602 United States	HQ (Virtual)
ARRIS Technology, Inc. 3871 Lakefield Drive Suwanee, GA 30024 United States	HW & SW DE, SAL, SER, SC
ARRIS Technology, Inc. 101 Tournament Dr. Horsham, PA, 19044 United States	HW & SW DE, SAL, SER, SC
ARRIS Technology, Inc. 6450 Sequence Drive San Diego, CA 92121 United States	HW & SW DE, SAL, SER, SC
ARRIS Technology, Inc. 900 Chelmsford St. Lowell, MA 01851 United States	HW & SW DE, SAL, SER, SC

Certificate Expires: January 09, 2023  
Certificate Reissued: September 03, 2021  
Certified Since: January 10, 2001



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# CERTIFICATE ADDENDUM

Certificate Number: 111045.000  
ADDENDUM Page Two of Five

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**ISO 9001:2015**

Site Address	Site Activities
ARRIS Solutions, Inc. 2400 Ogden Ave., Suite 180 Lisle, IL 60532 United States	HW & SW DE, SAL, SER, SC
ARRIS 15 Sterling Drive Wallingford, CT 06492 United States	HW & SW DE, SER, SC
ARRIS Technology, Inc. 2450/2500 Walsh Avenue Santa Clara, CA 95051 United States	HW & SW DE, SAL, SER
Ruckus Wireless International Inc. 350 West Java Dr. Sunnyvale, CA 94089 United States	HW & SW DE, SAL, SER, SC
CommScope Technologies LLC 2601 Telecom Parkway Richardson, TX 75082 United States	HW DE, SER
CommScope, Inc of North Carolina 6519 CommScope Road Catawba NC 28009 United States	HW DE, MFG, SAL
ARRIS Technology (Shenzhen) Co., Ltd. South & East Wing, 4F, Block 2 Vision (Shenzhen) Business Park Shenzhen P. R. China	SW DE
Ruckus Wireless Network Technology (Shenzhen) Co. Ltd. Units C&D, 5th Floor, No. 2 Finance base, 8 KeFa Road, Shenzhen, China	SW DE

Certificate Expires: January 09, 2023  
Certificate Reissued: September 03, 2021  
Certified Since: January 10, 2001



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# CERTIFICATE ADDENDUM

Certificate Number: 111045.000  
ADDENDUM Page Three of Five

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**ISO 9001:2015**

Site Address	Site Activities
Ruckus Wireless International Inc., Taiwan Branch @ Neihs District, Taipei City, Rui Road 411, 10th floor, Taipei	SW DE
ARRIS Group India Pvt Limited (AGIPL) Salarpuria Supreme, Ground Floor West Wing & First Floor Munnekolalu Village, Varthur Hobli, Outer Ring Road, Bangalore-560037	SW DE
ARRIS Group Australia Pty Ltd. Level 4, 460 Bourke Street Melbourne, Australia 3000	SAL, SER
ARRIS Group de Mexico S.A. de C.V. Av. La Paz 11721 Parque Industrial Pacifico Tijuana, BC 22643 Mexico	MFG, REP, SC
ARRIS Communications Ireland Limited Building 4300, Cork Airport Business Park Kinsale Road Cork County Ireland	HW & SW DE
ARRIS Group India Private Limited "The Senate" No:33/1, Ulsoor Road, Bangalore - 560 042 India	HW & SW DE
ARRIS Technology (Hangzhou) Company Limited Shanghai Branch 5th Floor, Building 11, No. 1257 MingYue Road, Pudong New District, Shanghai 201206, China	SW DE, SC

Certificate Expires: January 09, 2023  
Certificate Reissued: September 03, 2021  
Certified Since: January 10, 2001



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# CERTIFICATE ADDENDUM

Certificate Number: 111045.000  
ADDENDUM Page Four of Five

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**ISO 9001:2015**

Site Address	Site Activities
ARRIS International Ltd Slats Mill Victoria Road, Saltaire Shipley West Yorkshire BD 18 3LF United Kingdom	HW & SW DE, SAL, SER, SC
ARRIS Group, Inc. 50 Stranmillis Embankment Belfast, BT95FL Northern Ireland	SAL, SWDE, SER
CommScope Czech Republic, s.r.o. Turanka 856/98B 627 00 Brno Czech Republic	HW DE, MFG
CommScope CZ, spol. s.r.o. U Morusi 888, 53006 Pardubice Czech Republic Czech Republic	HW DE
CommScope Connectivity UK Limited Units 1 and 4 Kimmel Park Industrial Estate Bodelwyddan, Denbighshire, LL18 5TZ United Kingdom	HW DE, MFG, SAL
CommScope Design & Integration UK Ltd. Unit 5 Eden Business Park Eden House Drive Old Malton, Malton, North Yorkshire YO17 6AE United Kingdom	HW DE
CommScope Design & Integration UK Limited 412 The Quadrant, Birchwood Park Warrington, WA3 6FW United Kingdom	SAL

Certificate Expires: January 09, 2023  
Certificate Reissued: September 03, 2021  
Certified Since: January 10, 2001



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# CERTIFICATE ADDENDUM

Certificate Number: 111045.000  
ADDENDUM Page Five of Five

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**ISO 9001:2015**

Site Address	Site Activities
CommScope EMEA Ltd. Corke Abbey Avenue Bray, Co. Dublin Ireland	HW DE, MFG, SAL
CommScope EMEA Ltd. Diestsesteenweg 692 3010 Kessel-Lo, Belgium	HW DE, MFG, SAL
CommScope Italy Srl Via Archimede, 22/24 Agrate Brianza (MB) 20864 Italy	HW DE
Telecom Networks Americas AV. HIPOLITO YRIGROYEN 2999, DEPOSITO 6 EL TALAR, TIGRE Buenos Aires B1618AXD Argentine Republic	SAL, DIST
CommScope Networks India Private Limited Salarpuria Softzone, A Block, 1st Floor Survey No 80/1, 81/1, 81/2, B Wing, Belandur Village, Varthur Hobli, Outer Ring Bangalore – Karnataka 560103 India	SW DE
ADC India Communications Ltd. No 10 C , 2nd Phase Peenya Industrial Area Bangalore – Karnataka 560058 India	MFG, SAL

Certificate Expires: January 09, 2023  
Certificate Reissued: September 03, 2021  
Certified Since: January 10, 2001



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# CommScope Network Infrastructure System

25 Year Extended Product and Application Warranty  
("System Warranty")

# Terms and Conditions

**Extended Product Warranty.** CommScope warrants, for a period of twenty-five (25) years from the Certification Date (the “Warranty Period”), that Products in the Registered System shall be free from defects in materials or workmanship subject, to the terms and conditions below and the terms, conditions and limitations of CommScope’s Limited Product Warranty in effect at the date of sale (available at <http://www.commscope.com/Resources/Warranties/>).

**Application Warranty.** During the Warranty Period, the Registered System will meet or exceed the specifications set forth in the System Specification and support Applications as documented therein.

**System Warranty Requirements.** The System Warranty applies only to Products that are: (i) installed by an Authorized Partner, at the location listed on the System Warranty Certificate; (ii) installed in compliance with CommScope’s written design, engineering and installation procedures, and the specifications for the Application and the System Specification; (iii) designed, installed, and maintained in compliance with the applicable industry standards as set forth in the System Specification; (iv) not subject to conditions that exceed the individual Product Specification(s); (v) used at the original site of installation; (vi) tested pursuant to industry standards and applicable CommScope testing requirements and satisfactorily pass such tests; and (vii) not otherwise expressly excluded or invalidated under the System Warranty Terms and Conditions. To qualify for a System Warranty, all documents, including the prescribed System test results, must be submitted to CommScope for review within sixty (60) days of installation, and registration for the System Warranty must be applied for with CommScope within ninety (90) days from the date the installation is complete. CommScope, in its sole judgment, shall determine if the System Warranty Requirements have been met. CommScope’s approval of a System Warranty shall be evidenced by a numbered registration System Warranty Certificate issued by CommScope. In the event a System Warranty Certificate is issued and CommScope subsequently discovers that any of the System Warranty requirements were not met, then the System Warranty shall be void.

**Beneficiary and Warranty Transfer.** CommScope will only honor System Warranty claims made by the person or entity to which the System Warranty Certificate is issued. The System Warranty may, upon prior written approval from CommScope, be transferred to a successor in interest to the site where the Registered System was originally installed.

**Modifications.** Moves, repairs, alterations, additions, or changes to the Registered System (“Change(s)”) are only covered by the System Warranty if: (i) performed by an Authorized Partner; (ii) installed in compliance with CommScope’s written design, engineering and installation procedures, and the specifications for the Application and the System Specification, and (iii) designed, installed, and maintained in compliance with the applicable industry standards as set forth in the System Specification. Day-to-day administration and maintenance of the Registered System by the End-Customer will not void the System Warranty if performed in compliance with applicable CommScope system design and installation guidelines using CommScope approved products. All test results shall be sent for approval to CommScope along with a detailed description of the Change(s) and bill of materials within thirty (30) days of installation. If the Change(s) are approved, CommScope shall update the System Warranty registration to indicate the Change(s). Failure to comply with the foregoing relating to Change(s) shall void the System Warranty.

**Exclusions from Warranty and Limitations on Liability.** The “Exclusions from Warranty” and “Limitations on Liability” in the Limited Product Warranty shall apply to the System Warranty. The occurrence of an Exclusion from Warranty in the Limited Product Warranty shall void the System Warranty. The System Warranty shall also be void if any Product in the Registered System has been (i) removed from the original site of installation, (ii) altered, repaired or disassembled by a non-Authorized Partner, or (iii) exposed to, or has outside materials applied to it, including but not limited to paint, water, chemicals, solutions, cleaning supplies and lubricants (“Contamination”). End-Customer must notify an Authorized Partner or CommScope within 24 hours of any Contamination.



Outside Plant Cable is excluded from and will void the System Warranty when installed above ground and exposed to the outside environment, including but not limited to, an aerial installation. Outside Plant Cable installed underground, either by direct burial or in conduit, is not excluded from the System Warranty.

Failure of the End-Customer to submit any System Warranty claim to the authorized CommScope office as designated by CommScope within thirty (30) days following expiration of the System Warranty shall be an admission by the End-Customer and conclusive proof that the Registered System and Product(s) are in every respect as warranted and shall release CommScope and the Authorized Partner from any and all claims for damage or loss sustained by the End-Customer.

Any violation or non-compliance with the System Warranty Terms and Conditions will void the System Warranty.

**Remedies.** If during the Warranty Period, the End-Customer experiences problems with a Registered System or a Product in a Registered System ("Problem") and suspects there is a potential warranty claim hereunder, the End-Customer must first reasonably investigate potential causes of the suspected Problem that are not CommScope related and reasonably determine that none of these potential causes were responsible for the Problem. Once the End-Customer reasonably believes that all non-CommScope causes for the Problem are ruled out, but in no event more than thirty (30) days after the End-Customer knew or should have known of the Problem, the End-Customer must contact the Authorized Partner that installed the Registered System to report the Problem. If the Authorized Partner is unable to resolve the Problem, then the Authorized Partner will contact CommScope and make a claim under the System Warranty for further investigation and resolution.

If CommScope determines that a Problem is due to a breach of the System Warranty, CommScope will repair or replace Product as CommScope deems necessary to correct the Problem, including the provision of reasonable labor and removal and reinstallation of such Product at CommScope's discretion. CommScope shall only be responsible for costs that have received the prior written authorization of CommScope. If CommScope chooses to repair Product, CommScope may use new or reconditioned replacement parts. If CommScope chooses to replace Product, CommScope may replace with new or reconditioned products of the same or similar design. Any repair or replacement will be warranted for either (a) 90 days or (b) the remainder of the original Warranty Period, whichever is longer. If the Problem is found by CommScope or an Authorized Partner not to be related to a Product or any warranty exclusions, then End-Customer will be responsible for any costs incurred related to the Problem claim.

**Choice of Law.** The System Warranty shall be governed by and construed in accordance with the laws of the State of North Carolina, U.S.A. The United Nations Convention on Contracts for the International Sale of Goods shall not apply. The End-Customer acknowledges that as a condition to receiving the System Warranty, End-Customer unconditionally submits to the jurisdiction of the North Carolina state and federal courts. If any portion of the System Warranty is not enforceable due to local legal requirements, then such specific language shall be modified to meet local legal requirements consistent with CommScope's intent.



# Definitions

The following definitions shall apply to the System Warranty:

**CommScope** shall mean CommScope Technologies LLC.

**Application** shall mean a standardized set of network technologies, protocols, and hardware for enabling communication over the prescribed System as documented by CommScope.

**Authorized Partner** shall mean a party that is certified by CommScope as a CommScope installation partner and that is in good standing with CommScope at the time of installation.

**Authorized Reseller** shall mean a party that is authorized in writing by CommScope to sell Products and that is in good standing with CommScope at the time of sale.

**Certification Date** shall mean the earlier of the registration date on the face of the System Warranty Certificate or the Original Installation Completion Date.

**End-Customer** shall mean the end-user who has the Products installed at its premises by an Authorized Partner.

**Original Installation Completion Date** shall mean the date that the Authorized Partner completed the installation and testing of the Registered System at the End-Customer's site being submitted for System Warranty eligibility.

**Outside Plant Cable** shall mean all cabling located between demarcation points in buildings, switching and data centers and the demarcation point in another such facility.

**Passive** shall mean signal-carrying components that exhibit no gain or contribute no energy.

**Product(s)** shall mean Passive products manufactured by CommScope that are contained in the bill of materials, for an end-to-end SYSTIMAX®, UNIPRISE®, or NETCONNECT® system, which were filed with the registration for the System Warranty and which were purchased from an Authorized Reseller.

**Product Specification** shall mean CommScope's published specification(s), in effect at the time of sale, which defines the optical and/or electrical capabilities of the individual Products.

**Registered System** shall mean the System designated on the System Warranty Certificate.

**System** refers to the end-to-end SYSTIMAX®, UNIPRISE®, or NETCONNECT® system, comprised entirely of Products approved by CommScope for the respective System and that meet all of the conditions in the "System Warranty Requirements" Section of these System Warranty Terms and Conditions.

**System Specification** shall mean CommScope's published specification(s) in effect at the time of sale, which describes the optical and/or electrical capabilities of the System as a whole.

**System Warranty** shall mean the Extended Product and Application Warranty.

**System Warranty Certificate** shall mean the certificate issued by CommScope evidencing CommScope's approval and issuance of a System Warranty and identifying the covered System.

**Precedence.** In the event of any conflict between the terms of the System Warranty and CommScope's Limited Product Warranty and/or a System Specification, the terms of the System Warranty shall control.



commscope.com

Visit our website or contact your local CommScope representative for more information.

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Unless otherwise noted, all trademarks identified by ® or ™ are registered trademarks, respectively, of CommScope, Inc. This document is for planning purposes only and is not intended to modify or supplement any specifications or warranties relating to CommScope products or services. CommScope is committed to the highest standards of business integrity and environmental sustainability with a number of CommScope's facilities across the globe certified in accordance with international standards, including ISO 9001, TL 9000, and ISO 14001. Further information regarding CommScope's commitment can be found at [www.commscope.com/About-Us/Corporate-Responsibility-and-Sustainability](http://www.commscope.com/About-Us/Corporate-Responsibility-and-Sustainability).

BR-1110431-EN (06/18)

1. **Definitions.** For purposes of this Warranty, (i) “Buyer” shall mean the individual or entity identified on the applicable purchase order or supply agreement (or, if different, on Seller’s quotation, order acknowledgement or confirmation), (ii) “Seller” shall mean the CommScope entity identified on such entity’s quotation, order acknowledgement, confirmation or supply agreement, (iii) “Product” shall mean a product manufactured by Seller pursuant to the applicable supply agreement, quotation, order acknowledgement or confirmation, and (iv) “Warranty Period” shall mean one year from date of original shipment from Seller’s facility unless a different time period is set forth in **Exhibit A**.
2. **Limited Warranty.** Seller warrants that, as of the date of delivery, Seller has good title to the Product, free from any lawful security interest or other lien or encumbrance unknown to Buyer. In addition, during the Warranty Period, the Product will be free from defects in materials or workmanship arising under proper and normal use. This Warranty shall apply only to the Products and shall not apply to any other goods or materials, parts or components of a system or any system as a whole. This Warranty does not cover ordinary wear and tear. Seller does not warrant any products manufactured by third parties; provided that Seller will, to the extent permitted by the manufacturer, assign third-party warranties to Buyer.
3. **Inspection.** If Buyer claims that a Product is defective in materials or workmanship, Seller shall have the right to either examine the Product where it is located or, in its sole discretion, issue shipping instructions for return of the Product. Seller’s inspection in response to a warranty claim shall not constitute acceptance or acknowledgment of the claim’s validity. Buyer shall prepay all transportation charges for such return.
4. **Remedies.** Seller’s sole and exclusive obligation and Buyer’s exclusive remedy under this Warranty is Seller’s repair or replacement of the defective Product or a credit for the purchase price of the defective Product. Seller shall have sole discretion as to which of these remedies Seller will provide. Seller is not liable for any repair or maintenance costs incurred by Buyer, unless Seller authorizes such charges in writing in advance of the commencement of the work. If Seller elects to replace or repair the defective Product, the replaced or repaired Product will be warranted for the remainder of the Warranty Period applicable to the originally shipped Product, but the Warranty shall not be extended beyond the original Warranty Period.
5. **Notice and Waiver.** If Buyer discovers any defect in the Product, Buyer must provide prompt (and in no case later than thirty (30) days after discovery) written notice to Seller of the claimed defect. Such notice shall describe, in reasonable detail, the symptoms of such defect. The notice must be received by Seller during the Warranty Period for such Product. Failure to give timely notice of a claim shall result in Buyer’s waiver of such claim.
6. **Transfer of Ownership.** This Warranty is not transferable unless Buyer is expressly authorized by Seller in writing to resell the Product. In addition, Buyer must notify Seller on or before the fifteenth (15<sup>th</sup>) day after the date on which it transfers ownership of the warranted Product. Any transfers in violation of this Section shall invalidate this Warranty. Notice of the transfer of ownership must be in writing and shall include the name and address of the new owner.
7. **Exclusions from Warranty.** This Warranty shall not apply to problems attributable to, or as a result of:
  - (a) improper installation or misapplication of parts;
  - (b) chain or system failures induced by other products or components;
  - (c) lack of proper inspection or maintenance or failure to provide a suitable operating environment;
  - (d) any consumables provided with the Product and any other materials, components or products manufactured by a third party;
  - (e) power surges, fire, unusual mechanical, physical or electrical stress, severe weather conditions or acts of nature, including but not limited to, lightning or floods;
  - (f) usage or operation not in accordance with published ratings, specifications or instructions, including but not limited to environmental specifications identified by Seller;
  - (g) any adjustment, modification, alteration, removal or repair of any part of the Product not expressly authorized by Seller in writing;
  - (h) accidental damage, misuse, abuse, neglect or unauthorized access of the Product or of any system of which the warranted Product is a part;
  - (i) any type of aesthetic changes due to oxidation or corrosion occurring on stainless steel or galvanized steel parts installed in unusually corrosive marine and industrial atmospheres (in which case Seller’s only obligation shall be to ensure that Product complies with Seller’s published material specifications);
  - (j) use of the Product for purposes other than that for which it was designed; or
  - (k) mishandling during shipment of the Product.

This Warranty is for Products installed and used in accordance with Seller’s design, installation and operating parameters. Buyer’s failure to ensure conformity with such parameters will void all warranties. Under no circumstance shall Seller have any liability or obligation with respect to expenses, liabilities or losses associated with the installation or removal of any Product or the installation or removal of any components for inspection, testing or redesign occasioned by any defect or by any repair or replacement of a Product.

8. **Limitation on Liability.** THE WARRANTIES SET FORTH IN SECTION 2 HEREOF ARE EXCLUSIVE AND ARE MADE ONLY TO BUYER. SELLER MAKES NO OTHER REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, AND SPECIFICALLY DISCLAIMS AND EXCLUDES ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY, NONINFRINGEMENT OR FITNESS FOR A PARTICULAR PURPOSE AND ANY REPRESENTATION OR WARRANTY ARISING BY USAGE OF TRADE, COURSE OF DEALING OR COURSE OF PERFORMANCE. No person is authorized to give any additional warranties on Seller’s behalf or to assume for Seller any other liability, except in a writing signed by an authorized officer of Seller. SELLER’S TOTAL LIABILITY FOR ANY CLAIM OR DAMAGE ARISING OUT OF OR IN CONNECTION WITH THE MANUFACTURE, SALE, DELIVERY OR USE OF THE PRODUCTS WILL BE LIMITED TO PROVEN DIRECT DAMAGES, NOT TO EXCEED THE PURCHASE PRICE OF SUCH PRODUCTS. IN NO EVENT WILL SELLER BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL OR PUNITIVE DAMAGES, INCLUDING, WITHOUT LIMITATION, ANY CLAIM FOR LOSS OF ACTUAL OR ANTICIPATED REVENUES OR PROFITS. These limitations on liability will apply regardless of the form of action, whether in contract, tort, strict liability or otherwise, and whether damages were foreseeable and will survive failure of any exclusive remedies provided in Section 4 hereof.

9. **Choice of Law.** The terms and conditions contained herein and the rights of the parties to any transaction to which they relate shall be governed by and construed in accordance with the laws of the State of North Carolina, U.S.A. The United Nations Convention on Contracts for the International Sale of Goods shall not apply.

## LIMITED PRODUCT WARRANTY

### Exhibit A

Seller warrants that the Products identified below will be free from defects in material and workmanship arising under proper and normal use for the following Warranty Period:

<b>QR® Coaxial Cable</b>	Ten (10) years from the date of original shipment.
<b>ValuSite® Products</b>	Three (3) years from the date of original shipment.
<b>I-Line Accessory Products</b>	Three (3) years from the date of original shipment.
<b>Standard RADIAX® Cable, Connector, Accessory and Cable Assembly* Products</b>	Five (5) years from the date of original shipment, except for the following: (i) two (2) years for surge arrestors; and (ii) one (1) year for all other accessories.
<b>Standard CNT® Cable, Connector, Accessory and Cable Assembly† Products</b>	Five (5) years from the date of original shipment; except that the Warranty Period for Products purchased for resale purposes shall be one (1) year.
<b>Broadband RF Connectivity Products</b>	Five (5) years from the date of original shipment.
<b>Other OSP Cable Products (P3®, Drop Coax, Fiber Cable, Fiber Drop Cable, CIC)</b>	One (1) year from the date of original shipment
<b>FDH Products</b>	One (1) year from the date of original shipment
<b>Multiservice terminals (MST), Open Terminals (OTE) and Hardened Drop Cable Assemblies</b>	One (1) year from the date of original shipment
<b>OSP “Box” Products</b>	One (1) year from the date of original shipment
<b>Mini-RDTs and RDTs</b>	One (1) year from the date of original shipment
<b>FOSC™, FIST™ and Tenio™</b>	One (1) year from the date of original shipment
<b>OSP Copper Connect and Closure Products</b>	One (1) year from the date of original shipment
<b>Standard HELIAX® Cable, Connector, Accessory and Cable Assembly‡ Products</b>	Ten (10) years from the date of original shipment; except for the following: (i) three (3) years for ValuFlex® cable assemblies; (ii) three (3) years for weatherproofing kits; (iii) one (1) year for cable preparation tools (excluding blades); (iv) one year for single click-on hanger kits; and (v) two (2) years for surge arrestors.
<b>HELIAX® FiberFeed® Products, including FiberFeed® hybrid and fiber cables and assemblies, power cables and junction boxes</b>	One (1) year from the date of original shipment.
<b>Steel Products and Rapid Deployment Monopoles</b>	Three (3) years from the date of original shipment.
<b>Standard ION-B®, ION-E®, ION-M®, ION-U®, MR, p-POI®, i-POI®, e-POI™, and Node Repeater Products</b>	The earlier of: (i) one (1) year from the date of installation; or (ii) fifteen (15) months from the date of shipment.
<b>Premium Passive Products, including In-Building Directional Couplers, Hybrid Matrices, Tappers, Power Splitters, Terminations, Attenuators and CMAX Antenna Products</b>	Five (5) years from the date of original shipment.
<b>ValuDAS® Passive Products, including Air Directional Couplers, Hybrid Couplers, High Power Splitters, and Cell-Max™ Antennas</b>	Two (2) years from the date of original shipment.
<b>InterReach Fusion®</b>	One (1) year from the date of original shipment.
<b>InterReach Unison®</b>	One (1) year from the date of original shipment.
<b>FlexWave® Spectrum</b>	One (1) year from the date of original shipment.
<b>FlexWave® Prism</b>	One (1) year from the date of original shipment.
<b>FlexWave® Active Integration Panel (AIP)</b>	One (1) year from the date of original shipment.
<b>A.I.M.O.S. Software Products</b>	One (1) year from the date of original shipment.

\* RADIAX® Cable Assembly Product means any RADIAX® coaxial cable that has been fitted with Seller’s connectors in accordance with the installation instructions.

† CNT® Cable Assembly Product means any CNT® coaxial cable that has been fitted with Seller’s connectors by Seller or its certified distributor.

‡ HELIAX® Cable Assembly Product means any HELIAX® coaxial cable or elliptical waveguide that has been fitted with Seller’s connectors by Seller or its certified distributor.

## LIMITED PRODUCT WARRANTY

<b>In- Building and Fixed Subscriber Antennas</b>	The earlier of: (i) three (3) years from the date of installation or (ii) thirty-nine (39) months from the date of original shipment.
<b>OneCell® and S1000 Small Cell Platforms (excluding software)</b>	The earlier of: (i) one (1) year from the date of installation; or (ii) fifteen (15) months from the date of original shipment
<b>Small Cell Device Management System (DMS) Software for OneCell® and S1000 Small Cell Platforms</b>	Ninety (90) days from the date of original shipment
<b>Base Station Antenna Products</b>	Two (2) years from the date of original shipment for all base station antennas except base station antennas incorporating N-type connectors, which shall have a warranty of one (1) year from the date of original shipment.
<b>Standard Tower Mounted Amplifier, Bias Tee and Power Distribution Unit Products</b>	Two (2) years from the date of original shipment.
<b>Standard Filter, Diplexer and Triplexer Products</b>	Two (2) years from the date of original shipment.
<b>DryLine® Dehydrator Systems and Line Monitoring Systems</b>	Three (3) years from the date of original shipment or 3,000 hours of actual run time, whichever occurs first; except the Warranty Period for the compressor is only one (1) year from original shipment or 1,000 hours of actual run time, whichever occurs first. This Warranty Period does not apply to Factory Reconditioned Dehydrators, which are warranted for only one (1) year from the date of original shipment.
<b>Microwave Antennas</b>	Three (3) years from the date of original shipment.
<b>Terrestrial Microwave System Products (including Microwave System Flex-Twist, Coupler, Filter and Diplexer Products)</b>	Three (3) years from the date of original shipment.
<b>SiteRise™ Solutions</b>	One (1) year from the date of original shipment on workmanship for the Solution.
<b>Copper Structured Cabling Products</b>	One (1) year from the date of Installation
<b>Fiber Optic Panels, including Accessories, Mounting Hardware, Modules</b>	One (1) year from the date of shipment
<b>Fiber Optic Field Terminated Connectors, Kits, Tools, Consumables, Accessories</b>	One (1) year from the date of shipment
<b>Indoor Fiber Cable Patch Cords, Cable Assemblies, Fiber Trunks</b>	One (1) year from the date of shipment
<b>Passive Optical Components and Value Added Modules (VAMs)</b>	One (1) year from the date of shipment
<b>Fiber Guide Fiber Management System (FGS)</b>	One (1) year from the date of shipment
<b>Optical Distribution Frames, including Modules, Blocks, Accessories and Hardware</b>	One (1) year from the date of shipment
<b>Other Enterprise Products (Coax, Automotive Cables, Enterprise Enclosures and miscellaneous items) (excluding software)</b>	One (1) year from the date of installation.
<b>Cabinets Cable and Apparatus Products</b>	One (1) year from the date of original shipment.
<b>Electronic Enclosure Products (Cabinets)</b>	Two (2) years from the date of original shipment.
<b>Alifabs™ Cabinets &amp; Ancillary Products</b>	One (1) year from the date of original shipment.
<b>Alifabs™ Free Cooling Products and Accessories and Spare Parts, including Monitor</b>	Two (2) years from the date of original shipment.
<b>Alifabs™ Telecommunications Towers and Accessories</b>	One (1) year from the date of original shipment.
<b>Alifabs™ Services (power upgrades, enablements, installation and decommission work, rigging, and fault management)</b>	One (1) year from the date of completion of the work.
<b>Any other Software Products</b>	Ninety (90) days from the date of original shipment.



# CERTIFICATE

Certificate Number: 111045.000  
Including Seven Page Addendum

The Quality Management System and implementation of:

## CommScope, Inc.

With Virtual Central Function at:  
1100 CommScope Place SE  
Hickory, NC 28602  
United States

meets the requirements of the standard:

## ISO 9001:2015

### Scope:

The sales, marketing, design, manufacture, test, repair, support, service, and distribution of telecommunications products, components, and services for the telecommunications, wireless, and broadcast networks industries

Certificate Expires: January 04, 2026  
Certificate Issued: January 05, 2023  
Certified Since: January 10, 2001

Business Segments	Exceptions
Connectivity and Cable Solutions (CCS)	None
Networking, Intelligent Cellular & Security Solutions (NICS)	None
Outdoor Wireless Networks (OWN)	None
Access Network Solutions (ANS)	None



Dr. Cem O. Onus  
Managing Director

DEKRA Certification, Inc.  
1945 The Exchange SE #300  
Atlanta, GA 30339 USA  
(215) 997-4519  
<https://www.dekra.us/en/audits/>





# CERTIFICATE ADDENDUM

Certificate Number: 111045.000  
ADDENDUM Page One of Seven

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**ISO 9001:2015**

<b>Site Activities Legend:</b>	HQ = Headquarters	MFG = Manufacturing	SER = Services (Professional Services and/or Technical Support)
	HW DE= Hardware Development	REP = Repair	SC = Purchasing, Supplier Management, Manufacturing Support, Repair Support
	SW DE= Software Development	SAL = Sales, Marketing	DIST = Distribution

<b>Site Address</b>	<b>Site Activities</b>
CommScope Inc 1100 CommScope Place SE Hickory, NC 28602 United States	HQ (Virtual)
ARRIS Technology, Inc. 3871 Lakefield Drive Suwanee, GA 30024 United States	HW & SW DE, SAL, SER, SC
ARRIS Technology, Inc. 101 Tournament Dr. Horsham, PA, 19044 United States	HW & SW DE, SAL, SER, SC
ARRIS Technology, Inc. 6450 Sequence Drive San Diego, CA 92121 United States	SW DE, SER
ARRIS Technology, Inc. 900 Chelmsford St. Lowell, MA 01851 United States	HW & SW DE, SER, SC

Certificate Expires: January 04, 2026  
Certificate Issued: January 05, 2023  
Certified Since: January 10, 2001



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Managing Director

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# CERTIFICATE ADDENDUM

Certificate Number: 111045.000  
ADDENDUM Page Two of Seven

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**ISO 9001:2015**

Site Address	Site Activities
ARRIS Solutions, Inc. 2400 Ogden Ave., Suite 180 Lisle, IL 60532 United States	HW & SW DE, SAL, SER, SC
ARRIS 15 Sterling Drive Wallingford, CT 06492 United States	HW & SW DE, SER, SC
ARRIS Technology, Inc. 2450/2500 Walsh Avenue Santa Clara, CA 95051 United States	HW & SW DE, SAL, SER
Ruckus Wireless International Inc. 350 West Java Dr. Sunnyvale, CA 94089 United States	HW & SW DE, SER
Ruckus Wireless Network Technology (Shenzhen) Co. Ltd. Units C&D, 5th Floor, No. 2 Finance base, 8 KeFa Road, Shenzhen, China	SW DE, SC, HW DE

Certificate Expires: January 04, 2026  
Certificate Issued: January 05, 2023  
Certified Since: January 10, 2001



Dr. Cem O. Onus  
Managing Director

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# CERTIFICATE ADDENDUM

Certificate Number: 111045.000  
ADDENDUM Page Three of Seven

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**ISO 9001:2015**

Site Address	Site Activities
<b>Site Address</b>	<b>Site Activities</b>
CommScope Asia (Suzhou) Technologies Co., Ltd. 77 Qiming Road, Suzhou Industrial Park Suzhou, Jiangsu 215121 Peoples Republic of China	MFG, SC
Ruckus Wireless International Inc., Taiwan Branch @ Neihs District, Taipei City, Rui Road 411, 10th floor, Taipei	SW DE
ARRIS Group India Pvt Limited (AGIPL) Salarpuria Supreme, Ground Floor West Wing & First Floor Munnekolalu Village, Varthur Hobli, Outer Ring Road, Bangalore-560037	SW DE
ARRIS Group de Mexico S.A. de C.V. Av. La Paz 11721 Parque Industrial Pacifico Tijuana, BC 22643 Mexico	MFG, REP, SC
ARRIS Communications Ireland Limited Building 4300, Cork Airport Business Park Kinsale Road Cork County Ireland	HW & SW DE
ARRIS Group India Private Limited "The Senate" No:33/1, Ulsoor Road, Bangalore - 560 042 India	HW & SW DE

Certificate Expires: January 04, 2026  
Certificate Issued: January 05, 2023  
Certified Since: January 10, 2001



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Managing Director

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# CERTIFICATE ADDENDUM

Certificate Number: 111045.000  
ADDENDUM Page Four of Seven

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**ISO 9001:2015**

Site Address	Site Activities
ARRIS Group, Inc. 50 Stranmillis Embankment Belfast, BT95FL Northern Ireland	SW DE
CommScope Czech Republic, s.r.o. Turanka 856/98B 627 00 Brno Czech Republic	HW DE,
CommScope CZ, spol. s.r.o. U Morusi 888, 53006 Pardubice Czech Republic Czech Republic	HW DE,
CommScope Connectivity UK Limited Units 1 and 4 Kinmel Park Industrial Estate Bodelwyddan, Denbighshire, LL18 5TZ United Kingdom	HW DE, MFG, SAL
CommScope Design & Integration UK Ltd. Unit 5 & 6 Eden Business Park Eden House Drive Old Malton, Malton, North Yorkshire YO17 6AE United Kingdom	HW DE, MFG, SC

Certificate Expires: January 04, 2026  
Certificate Issued: January 05, 2023  
Certified Since: January 10, 2001



Dr. Cem O. Onus  
Managing Director

DEKRA Certification, Inc.  
1945 The Exchange SE #300  
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# CERTIFICATE ADDENDUM

Certificate Number: 111045.000  
ADDENDUM Page Five of Seven

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**ISO 9001:2015**

Site Address	Site Activities
CommScope Design & Integration UK Limited 412 The Quadrant, Birchwood Park Warrington, WA3 6FW United Kingdom	SER
CommScope EMEA Ltd. Corke Abbey Avenue Bray, Co. Dublin Ireland	MFG, SAL
CommScope EMEA Ltd. Diestsesteenweg 692 3010 Kessel-Lo, Belgium	HW DE, MFG, SAL
CommScope Italy Srl Via Archimede, 22/24 Agrate Brianza (MB) 20864 Italy	HW DE, REP, SW DE
Telecom Networks Americas AV. HIPOLITO YRIGROYEN 2999, DEPOSITO 6 EL TALAR, TIGRE Buenos Aires B1618AXD Argentine Republic	SAL, DIST
CommScope Networks India Private Limited Salarpuria Softzone, A Block, 1st Floor Survey No 80/1, 81/1, 81/2, B Wing, Belandur Village, Varthur Hobli, Outer Ring Bangalore – Karnataka 560103 India	SW DE
ADC India Communications Ltd. No 10 C , 2nd Phase Peenya Industrial Area Bangalore – Karnataka 560058 India	MFG, SC

Certificate Expires: January 04, 2026  
Certificate Issued: January 05, 2023  
Certified Since: January 10, 2001



**Dr. Cem O. Onus**  
Managing Director

DEKRA Certification, Inc.  
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# CERTIFICATE ADDENDUM

Certificate Number: 111045.000  
ADDENDUM Page Six of Seven

The Quality Management System and implementation of:

**CommScope, Inc.**

With site at:

**CommScope Asia (Suzhou) Technologies Co.,Ltd.**

77 Qiming Road, Suzhou Industrial Park

Suzhou, Jiangsu 215121

Peoples Republic of China

meets the requirements of the standard:

## ISO 9001:2015

The validity of this certificate depends on the validity of the main certificate.

### Scope:

Production of network cable, fiber cable and communication equipment component (copper patch cords, copper panel, accessories etc.)

**Certification Structure:** Multi-site

Certificate Expires:	January 04, 2026
Certificate Issued:	January 05, 2023
Certified Since:	January 10, 2001



Dr. Cem O. Onus  
Managing Director

DEKRA Certification, Inc.  
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# 证书附录

证书编号: 111045.000

附录第7页,共7页

质量管理体系和实施:

**CommScope, Inc.**

其场所:

**康普科技 (苏州) 有限公司**

中国江苏省苏州工业园区启明路77号,邮编215121

符合以下标准要求:

## ISO 9001:2015

本证书的有效性取决于主证书的有效性。

### 范围:

网络线、光缆、通信系统设备材料 (网络跳线、配线装置等) 的生产。

认证结构: 多场所

证书有效期: 2026.01.04

发证日期: 2023.01.05

首次发证日期: 2001.1.10



Dr. Cem O. Onus  
Managing Director

DEKRA Certification, Inc.  
1945 The Exchange SE #300  
Atlanta, GA 30339 USA  
(215) 997-4519  
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# Certificate of Registration

## ENVIRONMENTAL MANAGEMENT SYSTEM - ISO 14001:2015

This is to certify that:

CommScope, Inc. of North Carolina  
1100 CommScope Place SE  
Hickory  
North Carolina  
28603-0339  
USA


Holds Certificate No:

**EMS 648387**

and operates an Environmental Management System which complies with the requirements of ISO 14001:2015 for the following scope:

The environmental management system to control the risks associated with the manufacture, distribution, field support and central function of telecommunication products and services.

For and on behalf of BSI:

  
Carlos Pitanga, Chief Operating Officer Assurance – Americas

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 1 of 5



...making excellence a habit.™



Certificate No: **EMS 648387**

Location	Registered Activities
Andrew Telecommunications de Reynosa S. de R.L. de C.V. Av. Industrial Reynosa Lte 2 al 5 Parque Industrial Center Reynosa Tamaulipas 88780 Mexico	Manufacture and distribution of telecommunication products including antenna and cable.
CommScope Asia (Suzhou) Technologies Co., Ltd. EPZ II, 77 Qiming Road Suzhou Industrial Park Suzhou Jiangsu 215121 China	Manufacture and distribution of telecommunication products, including cable.
Andrew Telecommunications India Pvt. Ltd. Plot No. N-2, Phase IV Verna Industrial Estate Verna Salcette Goa 403 722 India	Manufacture and distribution of telecommunication products, including antenna and cable.
CommScope EMEA Ltd. Corke Abbey Avenue Bray County Dublin A98FY03 Ireland	Manufacture and distribution of telecommunication products, including cable and connectors.
CommScope Telecommunications (China) Co., Ltd. 68 West Su Hong Xi Lu Suzhou Industrial Park Suzhou Jiangsu 215021 China	Manufacture and distribution of telecommunication products, including antenna and cables.

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 2 of 5

This certificate remains the property of BSI and shall be returned immediately upon request.

An electronic certificate can be authenticated [online](http://www.bsigroup.com/ClientDirectory). Printed copies can be validated at [www.bsigroup.com/ClientDirectory](http://www.bsigroup.com/ClientDirectory). To be read in conjunction with the scope above or the attached appendix.

Information and Contact: BSI, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP. Tel: + 44 345 080 9000  
BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.  
A Member of the BSI Group of Companies.

Certificate No: **EMS 648387**

Location	Registered Activities
Andrew Wireless Systems GmbH Industriering 10 Buchdorf 86675 Germany	Manufacture and distribution of telecommunication products, including amplifiers and antenna systems.
CommScope, Inc. of North Carolina 1100 CommScope Place SE Hickory North Carolina 28603-0339 USA	Corporate headquarters responsible for management system oversight of all locations listed on this certificate.
CommScope Inc. 6519 CommScope Road Catawba North Carolina 28609-0199 USA	Manufacture and distribution of telecommunication products, including cable.
CommScope Inc. 3642 US Hwy 70 East Claremont North Carolina 28610-0879 USA	Manufacture and distribution of telecommunication products, including cable.
CommScope Czech Republic s.r.o. Turanka 98B Brno 62700 Czech Republic	Manufacture and distribution of telecommunication products, including connectors and terminations.
CommScope Inc. of North Carolina 1100 CommScope Place SE Hickory North Carolina 28603-0339 USA	Customer care, facility maintenance, and administrative functions.
ADC de Delicias, S. de R.L. de C.V. Blvd. Fernando Baeza No. 1301 Sur Delicias Chihuahua 33000 Mexico	Manufacturing and distribution of telecommunication products.

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 3 of 5

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To be read in conjunction with the scope above or the attached appendix.

Information and Contact: BSI, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP. Tel: + 44 345 080 9000

BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.

A Member of the BSI Group of Companies.

Certificate No: **EMS 648387**

Location	Registered Activities
ADC de Juarez S. de R.L. de C.V. Parque Industrial Antonio J Bermudez Ciudad Juarez Chihuahua 32470 Mexico	Manufacturing and distribution of telecommunication products.
CommScope Connectivity Belgium bvba Diestsesteenweg 692 Kessel-lo 3010 Belgium	Manufacture and distribution of telecommunication products.
CommScope Technologies de Juarez S. de R.L. de C.V. Santiago Troncoso 331 Praderas del Sur, Ciudad Juarez Chihuahua 32575 Mexico	Manufacture of Fiber Optic Splice Closures (FOSC), Fiber Guide Systems (FGS), Hardened Connectivity and Molding-Gel Filling, including: plastic injection molding, plastic extrusion, plastic and metal machining, and assembly operations.
CommScope Connectivity UK Limited Unit 1 Kinmel Park Bodelwyddan Rhyl, Denbighshire LL18 5TZ United Kingdom	Fibre optic cable manufacturing, termination and design of other telecommunication products and services.
CommScope 11312 S. Pipeline Road Eules Texas 76040 USA	Manufacture, distribution, field support and central function of telecommunication products.
ARRIS GROUP DE MEXICO SA DE CV Av. De la Paz, #11721 Parque Industrial Pacifico Tijuana Baja California 22643 Mexico	Manufacture, repair, support, repair service, distribution of products and components for telecommunications that provide integrated solutions for voice, video and data through the processes of SMT, manual and mechanical assembly, soldering (manual, selective, printed, wave) electrical testing and packaging.

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

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Certificate No: **EMS 648387**

Location	Registered Activities
CommScope Design & Integration UK Ltd Unit 5 & 6, Eden Business Park Edenhouse Drive Old Malton Malton YO17 6AE United Kingdom	Manufacture and distribution of telecommunications products including cabinets.
Arris Indústria Eletrônica do Brasil Ltda. CNPJ: 09.154.836/0001-15 Avenida Torquato Tapajós, 9475 Tarumã Manaus Amazonas 69041-025 Brasil	Manufacturer and distribution of Receivers, Television signal Decoders and Modulator/Router.
CommScope Design and Integration UK Ltd. Lovell House, 412 The Quadrant Birchwood Park Warrington WA3 6FW United Kingdom	Telecommunications project management, site surveys, installations commissioning and rigging.

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

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Information and Contact: BSI, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP. Tel: + 44 345 080 9000  
BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.  
A Member of the BSI Group of Companies.

# DECLARATION OF PERFORMANCE

**No. Z-LA/25D/C**  
**(Fibre count range 2 - 144, all fibre types)**

1. Unique identification code of the product type: **Z-□□□-LA-□□-□□□BK/25D/C**
2. Type, batch or serial number: **Found on packaging label**
3. Intended use(s): *Supply of communications in buildings and other civil engineering works, communication cable with the objective of limiting the generation and spread of fire and smoke.*
4. Manufacturer Name: *CommScope EMEA, Ltd.  
Corke Abbey Avenue  
Bray, Wicklow, Ireland A98 FY03  
Tel: +351 1 204 2000  
Fax: +351 1 204 2003*
5. Authorized representative: *Not Applicable*
6. System/s of AVCP: **System 1+**
7. Harmonized standard: **EN50575:2014+A1:2016**  
 Notified body(s): *NB 2821 – UL International (Netherlands) B.V.*  
*Notified body No. 2821 performed the determination of the product type, the initial inspection of the manufacturing facility and of FPC, the continuous surveillance, assessment and evaluation of the FPC and the audit testing of samples taken before placing the product on the market and issued the certificate of constancy of performance.*
8. Declared performance(s):

Essential Characteristics	Performance	Harmonized Technical Specification
Reaction to Fire	<b>Cca-s1b,d2,a1</b>	EN50575:2014+A1:2016
Dangerous Substances	<b>None</b>	

9. Appropriate Technical Documentation and/or Specific Technical Documentation:  
*Report Number: CoCP 2821-CPR-200077*

The performance of the product identified above is in conformity with this set of declared performance/s. This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011 under the sole responsibility of the manufacturer identified above.

Signed for and on behalf of the manufacturer by:

**Name:** Nathan Hatch

**Function:** Product Engineer

**At (place):** CommScope, Claremont, NC USA

**on (date of issue):** 2021-05-12

**Signature:**  .....



## LIMITED WARRANTY



1. **Definitions.** For purposes of this Warranty, (i) "Buyer" shall mean the individual or entity identified on the applicable purchase order or supply agreement (or, if different, on Seller's quotation, order acknowledgement or statement of work ), (ii) "Seller" shall mean the CommScope entity identified on such entity's quotation, order acknowledgement, statement of work or supply agreement, (iii) "Hardware" means equipment designed and manufactured by or on behalf of Seller, or any third-party manufacturer's equipment offered for sale by Seller to Buyer, (iv) "Product" shall mean a product manufactured by or on behalf of Seller pursuant to the applicable supply agreement, quotation or order acknowledgement, and includes any combination of Hardware and Software, (v) "Services" means site engineering, system integration, product installation, implementation, training, maintenance and technical support services for Products, or other professional services provided by Seller to Buyer. Services exclude managed services and hosted cloud services provided by Seller, (vi) "Software" means Seller-licensed software, either embedded or standalone, including any updates provided, and any other enhancements, modifications, and bug fixes provided thereto, in object code form only (unless otherwise specified), and any full or partial copies thereof. Software does not include software created or owned by third parties, including but not limited to MediaKind Software, Google's Android Software or any third party application software, and (vii) "Warranty Period" means, unless a different time period is set forth in **Exhibit A**, (a) for Hardware, one year from date of original shipment from Seller's facility, (b) for Software-only Products, ninety (90) days from the date such Software is first made available to Buyer, or for Software embedded in a Hardware Product, ninety (90) days from date of original shipment of the Product from Seller's facility, and (c) for Services, thirty (30) days from the date the performance of such Services has been rendered.

2. **Limited Warranty.** Seller warrants that, as of the date of delivery, Seller has good title to the Product, free from any lawful security interest or other lien or encumbrance unknown to Buyer. In addition, during the Warranty Period, the Product and Services will be free from defects in materials or workmanship arising under proper and normal use. This Warranty shall apply only to the Products and Services and shall not apply to any other goods or materials, parts or components of a system or any system as a whole. This Warranty does not cover ordinary wear and tear. Seller does not warrant (i) Products not purchased from Seller or its authorized resellers; (ii) that the operation of the Product will be uninterrupted or error-free; (iii) that the Product will operate in combination with other third-party products selected by Buyer; or (iv) any products manufactured by third parties; provided that Seller will, to the extent permitted by the manufacturer, assign third-party warranties to Buyer. Seller gives no warranty for, and shall have no liability with respect to, any defects arising from any software (other than the Software), including, but not limited to MediaKind Software, Android Software or any third-party application software, downloaded to or otherwise used in conjunction with the Product. Seller further warrants to Buyer that during the Warranty Period, all Services performed by Seller for Buyer will be provided in a workmanlike manner.

3. **Disclaimers.** EXCEPT AS EXPRESSLY SET FORTH IN THIS LIMITED WARRANTY OR IN A SEPARATE, APPLICABLE SOFTWARE LICENSE AGREEMENT, ALL SOFTWARE IS LICENSED ON AN "AS IS" BASIS WITHOUT WARRANTY.

4. **Inspection and Return Authorization.** Buyer must promptly notify Seller of any claimed defect in the Product and/or Services. If Buyer claims that a Product is defective in materials or workmanship, Seller shall have the right to either examine the Product where it is located or, in its sole discretion, issue shipping instructions for return of the Product. Seller's inspection in response to a warranty claim shall not constitute acceptance or acknowledgment of the claim's validity. Except as otherwise agreed to in writing, Products may not be returned to Seller without prior authorization. Buyer must contact Seller to obtain an authorization number and return the Products to the location designated by Seller. Any Products returned to Seller without proper authorization will be returned to Buyer at Buyer's expense. Risk of loss, damage and insurance responsibilities for the Products shall not pass from Buyer to Seller until delivery of the Products to Seller's designated location. Buyer shall prepay all transportation charges for such return.

5. **Remedies.** Seller's sole and exclusive obligation and Buyer's exclusive remedy under this Warranty is Seller's repair or replacement of the defective Product or re-performance of Services or issuance of a credit for the net book value of the purchase price of the defective Product. Seller shall have sole discretion as to which of these remedies Seller will provide. Seller is not liable for any repair or maintenance costs incurred by Buyer, unless Seller authorizes such charges in writing in advance of the commencement of the work. If Seller elects to replace or repair the defective Product, the replaced or repaired Product will be warranted for the remainder of the Warranty Period applicable to the originally shipped Product, but the Warranty shall not be extended beyond the original Warranty Period. Replacement Products may be new, refurbished or contain refurbished materials.

6. **Notice and Waiver.** If Buyer discovers any defect in the Product, Buyer must provide prompt (and in no case later than thirty (30) days after discovery) written notice to Seller of the claimed defect. Such notice shall describe, in reasonable detail, the symptoms of such defect. The notice must be received by Seller during the Warranty Period for such Product. Failure to give timely notice of a claim shall result in Buyer's waiver of such claim.

7. **Transfer of Ownership.** This Warranty is not transferable unless Buyer is expressly authorized by Seller in writing to resell the Product. In addition, Buyer must notify Seller on or before the fifteenth (15<sup>th</sup>) day after the date on which it transfers ownership of the warranted Product. Any transfers in violation of this Section shall invalidate this Warranty. Notice of the transfer of ownership must be in writing and shall include the name and address of the new owner.

8. **Exclusions from Warranty.** This Warranty shall not apply to problems attributable to, or as a result of:

- (a) improper installation or misapplication of parts;
- (b) chain or system failures induced by other products or components;
- (c) lack of proper inspection or maintenance or failure to provide a suitable operating environment;
- (d) any consumables provided with the Product, including but not limited to batteries and other accessories, and any other materials, components or products manufactured by a third party;
- (e) power surges, fire, unusual mechanical, physical or electrical stress, severe weather conditions or acts of nature, including but not limited to, lightning or floods;
- (f) usage or operation not in accordance with published ratings, specifications or instructions, including but not limited to environmental specifications identified by Seller;
- (g) any adjustment, modification, alteration, removal or repair of any part of the Product, including but not limited to removal or alteration of serial numbers or other identifying marks not expressly authorized by Seller in writing;
- (h) accidental damage, misuse, abuse, neglect or unauthorized access of the Product or of any system of which the warranted Product is a part;
- (i) any type of aesthetic changes due to oxidation or corrosion occurring on stainless steel or galvanized steel parts installed in unusually corrosive marine and industrial atmospheres (in which case Seller's only obligation shall be to ensure that Product complies with Seller's published material specifications);
- (j) use of the Product for purposes other than that for which it was designed; or
- (k) mishandling during shipment of the Product.



## LIMITED WARRANTY

This Warranty is for Products installed and used in accordance with Seller's design, installation and operating parameters. Buyer's failure to ensure conformity with such parameters will void all warranties. Under no circumstance shall Seller have any liability or obligation with respect to expenses, liabilities or losses associated with the installation or removal of any Product or the installation or removal of any components for inspection, testing or redesign occasioned by any defect or by any repair or replacement of a Product.

9. **Limitation on Liability.** THE WARRANTIES SET FORTH IN SECTION 2 HEREOF ARE EXCLUSIVE AND ARE MADE ONLY TO BUYER. SELLER MAKES NO OTHER REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, AND SPECIFICALLY DISCLAIMS AND EXCLUDES ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY, NONINFRINGEMENT OR FITNESS FOR A PARTICULAR PURPOSE AND ANY REPRESENTATION OR WARRANTY ARISING BY USAGE OF TRADE, COURSE OF DEALING OR COURSE OF PERFORMANCE. No person is authorized to give any additional warranties on Seller's behalf or to assume for Seller any other liability, except in a writing signed by an authorized officer of Seller. SELLER'S TOTAL LIABILITY FOR ANY CLAIM OR DAMAGE ARISING OUT OF AND/OR IN CONNECTION WITH THE MANUFACTURE, SALE, DELIVERY OR USE OF THE PRODUCTS OR SERVICES WILL BE LIMITED TO PROVEN DIRECT DAMAGES, NOT TO EXCEED (I) FOR PRODUCTS, THE DEPRECIATED VALUE OF THE PURCHASE PRICE OF SUCH PRODUCTS OR (II) FOR SERVICES, THE ACTUAL AMOUNT PAID TO SELLER FOR SERVICES DURING THE 12 MONTH PERIOD IMMEDIATELY PRIOR TO THE EVENT (OR SERIES OF EVENTS) GIVING RISE TO THE LIABILITY. IN NO EVENT WILL SELLER BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL OR PUNITIVE DAMAGES, INCLUDING, WITHOUT LIMITATION, ANY CLAIM FOR LOSS OF ACTUAL OR ANTICIPATED DATA, USE, REVENUES OR PROFITS. The Products are not specifically designed, tested, manufactured or intended for operation or use in any inherently dangerous, life endangering or life support applications where any failure of the Products could lead to death, personal injury or significant physical or environmental damage (High Risk Activities). If Buyer uses the Products in High Risk Activities, including but not limited to nuclear facilities or the flight, navigation or communication of aircraft, Buyer agrees that neither Seller nor its third party licensors are liable in whole or in part, for any claims or damages arising from such use, and that Buyer shall indemnify and hold Seller and its third party licensors harmless from any and all claims for loss, cost, damage, expense or liability arising out of or in connection with any use of the Products in High Risk Activities. These limitations on liability will apply regardless of the form of action, whether in contract, tort, strict liability or otherwise, and whether damages were foreseeable and will survive failure of any exclusive remedies provided in Section 4 hereof.

10. **Choice of Law.** The terms and conditions contained herein and the rights of the parties to any transaction to which they relate shall be governed by and construed in accordance with the laws of the State of North Carolina, U.S.A. The United Nations Convention on Contracts for the International Sale of Goods shall not apply.

## LIMITED WARRANTY

### Exhibit A

Product Categories	Warranty Period from Original Shipment Date*
<b>Category A Products</b> E6000® Converged Edge Router (CER); E6000n™ Remote PHY Devices (RPDs); E6000r™ Remote PHY Shelves; E6000n™ Remote MACPHY Devices (RMDs); vManager; Remote OLT (R-OLT); associated power supplies and accessories. FLX PON OLT portfolio including vOLT. CherryPicker products, Encoder products including ME-7000, SE-6000; DSR-4xxx, DSR-6xxx and DSR-7xxx series IRD products, and Uplink systems including TME-2020, VDP-1000, BNC, DEM, and SEM; All APEX Universal EQAM including APEX1000 and APEX3000; All Aloha interactive products including OM2000, ARPD, ADM4000 and NC1500 4.0. All SDM products. All VUE and VTM Software Products. All STDC products.	Hardware One (1) Year Software Ninety (90) Days
<b>Category B Products</b> All High and Standard Definition Transport Adapter MS4000™ Media Streamer	Hardware One (1) Year Software Ninety (90) days ** For certain CPE, option for 1% overship in lieu of Hardware warranty is standard
<b>Category C Products</b> Intentionally left blank.	
<b>Category D Products</b> All Third Party OEM Products: power meters; All VUE and VTM hardware platforms; NC1500 4.0 hardware platform; LQA256 Legacy QAM Adapter; Elemental Products including Live, Server, Delta, Conductor and StatMux; DC2180 Cabinet Node, Cooling Systems	Pass Through from OEM: Hardware One (1) Year Software Ninety (90) Days
<b>Category E Products</b> Intentionally left blank	
<b>Category F Products</b> All OM and SG optical node platforms, Flex Max® and Starline® amplifier platforms, RF Taps & Passives, and Optical Passives	Hardware Five (5) Years within the United States and Canada Hardware Three (3) Years outside United States and Canada Software Ninety (90) Days
<b>Category F1 Products</b> All CHP Headend Optical (HEO) Elements	Hardware Three (3) Years Software Ninety (90) Days
<b>Category G1 Products</b> All NC optical node platforms and Optical Passives, including OP/NP/DP/DC models.	Hardware Five (5) Years Software Ninety (90) Days
<b>Category G2 Products</b> All CH3 Headend (HEO) Elements	One (1) year
<b>Category G3 Products</b> All EPON and GPON ONUs, RFoG/HPON R-ONUs, including, CP8 models and associated power supplies and accessories	Hardware Three (3) Years Software Ninety (90) Days

## LIMITED WARRANTY

<b>Category H Products</b> All ConvergeMedia™ Distribution Platforms and Management Suite, AdManager™ including SkyVision Ad Management and EMP solutions CVEx™, SVA, all Vertasent products including SVOM, SVM and ERM, AdEdge™ COM and AdEdge APS,VMS, Manifest Delivery Controller (MDC), ARRIS Video Content Manager (AVCM) and Next Generation Insertion (NGI) and Multicast ABR.	Hardware One (1) Year Software Ninety (90) Days
<b>Category I Products</b> ServAssure® Advanced, ServAssure® NXT - Alarm Central, ServAssure® NXT - Analyze, ServAssure Domain Manager and EventAssure™. WorkAssure™® Workforce Management, Mobile TV, SecureMedia and Titanium	Hardware One (1) Year Software Ninety (90) Days
<b>Category J Products</b> Intentionally left blank	
<b>Category K Products</b> Intentionally left blank.	
<b>Category L Products</b> Intentionally left blank	
<b>Category M Products</b> Intentionally left blank.	
<b>Category N Products</b> Intentionally left blank.	
<b>Category O Products</b> All CAS Products including DAC, CASMR (and associated plug-ins), CAST, Advisor, CSS, OLL, CSS-Lite, KLS, DKS, CPMS	DAC, CASMR, CAST, Advisor, CSS Hardware Three (3) Years OLL, CSS-Lite, KLS, DKS, OLES, CPMS Hardware One (1) Year Software Ninety (90) Days
<b>Category P Products</b> Intentionally left blank.	
<b>Category P1 Products</b> Intentionally left blank	
<b>Category Q Products</b> Intentionally left blank	
<b>Category R Products</b> Intentionally left blank	
<b>Category R1 Products</b> Intentionally left blank	
<b>Category S Products</b> Intentionally left blank	
<b>Category S1 Products</b> Intentionally left blank	



## LIMITED WARRANTY

<p><b>Category T Products</b> RUCKUS Wi-Fi</p>	<p>Hardware:</p> <ul style="list-style-type: none"> <li>- Indoor Access Points and Wall Plate Access Points – Limited Lifetime Warranty,** except for access points with an “e” suffix (e.g., R350e), for which the HW warranty period is one (1) year.</li> <li>- Outdoor Access Points – One (1) Year</li> <li>- Controllers – One (1) Year, except ZoneDirector controllers are covered by the Limited Lifetime Warranty**</li> </ul> <p>Software Ninety (90) Days</p>
<p><b>Category T1 Products</b> RUCKUS ICX Switches</p>	<ul style="list-style-type: none"> <li>- ICX Switches (including switch modules, PSUs, and Fans, but excluding removable optics/transceivers and LEDs) – Limited Lifetime Warranty,** except for ICX 7150- C08PT, for which the HW warranty period is 13 months.</li> <li>- LEDs – 12 months</li> <li>- Removable Optics/Transceivers – 60 months (13 months if shipped from Seller prior to June 1, 2021)</li> </ul> <p>Software: Limited lifetime access to defect repairs, and software maintenance updates through end of support date of product</p>
<p><b>Category T2 Products</b> Intentionally left blank</p>	
<p><b>Category U Products</b></p> <p>Other OSP Cable Products (P3®, Drop Coax, Fiber Cable, Fiber Drop Cable, CIC)</p> <p>NovuX Products</p> <p>Prodigy</p> <p>Products FDH</p> <p>Products</p> <p>Multiservice terminals (MST), Open Terminals (OTE) and Hardened Drop Cable</p> <p>Assemblies OSP “Box” Products</p> <p>Mini-RDTs and RDTs</p> <p>FOSC™, FIST™ and</p> <p>Tenio™</p> <p>OSP Copper Connect and Closure Products</p> <p>HELIAX® FiberFeed® Products, including FiberFeed® hybrid and fiber cables and assemblies, power cables and junction boxes</p> <p>Fiber Optic Panels, including Accessories, Mounting Hardware, Modules</p> <p>Fiber Optic Field Terminated Connectors, Kits, Tools, Consumables,</p> <p>Accessories Indoor Fiber Cable, Patch Cords, Cable Assemblies, Fiber Trunks</p> <p>Passive Optical Components and Value Added Modules (VAMs)</p> <p>FiberGuide® : Fiber cable Management System</p> <p>Optical Distribution Frames, including Modules, Blocks, Accessories and</p> <p>Hardware Cabinets Cable and Apparatus Products</p> <p>Alifabs™ Cabinets &amp; Ancillary Products</p> <p>Alifabs™ Telecommunications Towers and Accessories</p> <p>Metro Cell Products, including Enclosures; Integrated Pole; Standard Poles; Accessories; and Wood Pole Brackets</p>	<p>One (1) year</p>

## LIMITED WARRANTY

<b>Category V Products</b> ValuDAS® Passive Products, including Air Directional Couplers, Hybrid Couplers, High Power Splitters, and Cell-Max™ Antennas Standard Tower Mounted Amplifier, Bias Tee and Power Distribution Unit Products Standard Filter & Combiner Products  Electronic Enclosure Products (Cabinets)  Alifabs™ Free Cooling Products and Accessories and Spare Parts, including  Monitor All-In-One FLX (Active Passive Cabines)  PowerShift™ & Power Products	Two (2) years
<b>Category W Products</b> ValuSite® Products  I-Line Accessory Products  Microwave Antennas  Terrestrial Microwave System Products (including Microwave System Flex-Twist, Coupler, Filter and Diplexer Products)	Three (3) years
<b>Category X Products</b> Broadband RF Connectivity Products   Premium Passive Products, including In-Building Directional Couplers, Hybrid Matrices, Tappers, Power Splitters, Terminations, Attenuators and CMAX Antenna Products	Five (5) years
<b>Category Y Products</b> QR® Coaxial Cable	Five (5) years
<b>Category Z Products</b> Standard RADIAX® Cable, Connector, Accessory and Cable Assembly* Products  * RADIAX® Cable Assembly Product means any RADIAX® coaxial cable that has been fitted with Seller's connectors in accordance with the installation instructions.	One (1) year
<b>Category AA Products</b> Standard CNT® Cable, Connector, Accessory and Cable Assembly* Products  * CNT® Cable Assembly Product means any CNT® coaxial cable that has been fitted with Seller's connectors by Seller or its certified distributor	Five (5) years; except that the Warranty Period for Products purchased for resale purposes shall be one (1) year.
<b>Category BB Products</b> Standard HELIAX® Cable, Connector, Accessory and Cable Assembly* Products  * HELIAX® Cable Assembly Product means any HELIAX® coaxial cable or elliptical waveguide that has been fitted with Seller's connectors by Seller or its certified distributor.	Ten (10) years; except for the following: (i) three (3) years for weatherproofing kits (including SureGuard boots); (ii) one (1) year for cable preparation tools (excluding blades); (iii) one year for single click-on hanger kits; and (iv) two (2) years for surge arrestors.
<b>Category CC Products</b> Standard ERA/ION-E®, ION-M®, ION-U®, MR, CMR, i-POI®, e-POI™, and Node Repeater Products	Hardware, the earlier of: (i) one (1) year from the date of installation; or (ii) fifteen (15) months from the date of shipment. Software Ninety (90) Days
<b>Category DD Products</b> In- Building and Fixed Subscriber Antennas	The earlier of: (i) three (3) years from the date of installation or (ii) thirty-nine (39) months from the date of original shipment

## LIMITED WARRANTY

<b>Category EE Products</b> OneCell®  Powered Fiber Cable Solution: Hybrid Copper and Fiber Cables, Class 2 Power Supplies, Indoor/Outdoor POE Extenders, Field Terminated Outlets, Consolidation Boxes and Related Passive Components	Hardware, the earlier of: (i) one (1) year from the date of installation; or (ii) fifteen (15) months from the date of original shipment Software Ninety (90) Days
<b>Category FF Products</b> Small Cell Device Management System (DMS) Software DAS Device Management System (AIMOS) Software	Ninety (90) days
<b>Category GG Products</b> Base Station Antenna, Small Cell Antenna & Mosaic™ Products	Two (2) years for all base station antennas except base station antennas incorporating N-type connectors, which shall have a warranty of one (1) year
<b>Category HH Products</b> DryLine® Dehydrator Systems and Line Monitoring Systems	Three (3) years or 3,000 hours of actual run time, whichever occurs first; except the Warranty Period for the compressor is only one (1) year or 1,000 hours of actual run time, whichever occurs first.
<b>Category II Products</b> SiteRise™ Solutions	One (1) year on workmanship for the Solution.
<b>Category JJ Products</b> Copper Structured Cabling Products  Other Enterprise Products (Coax, Automotive Cables, Enterprise Enclosures and miscellaneous items) (excluding software)	One (1) year from the date of Installation
<b>Category KK Products</b> Alifabs™ Services (power upgrades, enablements, installation and decommission work, rigging, and fault management)	One (1) year from the date of completion of the work.
<b>Category LL Products</b> imVision Overlays and Controllers	Three (3) years

*\* For Category H and Category I Products only, if Seller is engaged by Buyer to provide Services for the implementation of the purchased Products, warranty period for such Products shall commence upon Buyer's acceptance of the Products and Services.*

*\*\* For Category T Products only, "Limited Lifetime Warranty" means the period beginning on the Product shipment date and continuing for as long as the original end user of the Product continues to own and use the Product. For Category T1 Products only, "Limited Lifetime Warranty" means the period beginning on the Product shipment date and continuing (i) for as long as the original end user of the Product continues to own and use the Product or (ii) through the End of Support date, as defined in the RUCKUS End of Life Policy, whichever is earlier.*



# Certificate of Registration

## QUALITY MANAGEMENT SYSTEM - ISO 9001:2015

This is to certify that:

Arris Indústria Eletrônica do Brasil  
Ltda.  
CNPJ: 09.154.836/0001-15  
Avenida Torquato Tapajós, 9475  
Tarumã  
Manaus  
Amazonas  
69041-025  
Brasil

Holds Certificate No:


**FM 752494**

and operates a Quality Management System which complies with the requirements of ISO 9001:2015 for the following scope:

Manufacture of Television Signal Receivers / Decoders and Modems / Routers.

This certificate is traceable to the certificate number SGQ-2276 originally issued by TÜV Rheinland do Brasil Ltda. in 2009-10-09.

For and on behalf of BSI:

  
Carlos Pitanga, Chief Operating Officer Assurance – Americas

Original Registration Date: 2009-10-09

Latest Revision Date: 2021-09-24

Effective Date: 2021-10-09

Expiry Date: 2024-10-08

Page: 1 of 1



...making excellence a habit.™

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An electronic certificate can be authenticated [online](https://www.bsigroup.com/ClientDirectory). Printed copies can be validated at [www.bsigroup.com/ClientDirectory](https://www.bsigroup.com/ClientDirectory)  
To be read in conjunction with the scope above or the attached appendix.

BSI Brasil: Rua Gomes de Carvalho, 1306 - 11º andar - Cjs.: 111/112, Vila Olímpia - São Paulo - SP - 04547-005 Telephone: +55 11-21489600

Americas Headquarters: BSI Group America Inc., 12950 Worldgate Drive, Suite 800, Herndon, VA 20170-6007 USA  
A Member of the BSI Group of Companies.

# Certificate of Registration

## ENVIRONMENTAL MANAGEMENT SYSTEM - ISO 14001:2015

This is to certify that:

CommScope, Inc. of North Carolina  
1100 CommScope Place SE  
Hickory  
North Carolina  
28603-0339  
USA


Holds Certificate No:

**EMS 648387**

and operates an Environmental Management System which complies with the requirements of ISO 14001:2015 for the following scope:

The environmental management system to control the risks associated with the manufacture, distribution, field support and central function of telecommunication products and services.

For and on behalf of BSI:

  
Carlos Pitanga, Chief Operating Officer Assurance – Americas

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 1 of 5



...making excellence a habit.™

Certificate No: **EMS 648387**

Location	Registered Activities
Andrew Telecommunications de Reynosa S. de R.L. de C.V. Av. Industrial Reynosa Lte 2 al 5 Parque Industrial Center Reynosa Tamaulipas 88780 Mexico	Manufacture and distribution of telecommunication products including antenna and cable.
CommScope Asia (Suzhou) Technologies Co., Ltd. EPZ II, 77 Qiming Road Suzhou Industrial Park Suzhou Jiangsu 215121 China	Manufacture and distribution of telecommunication products, including cable.
Andrew Telecommunications India Pvt. Ltd. Plot No. N-2, Phase IV Verna Industrial Estate Verna Salcette Goa 403 722 India	Manufacture and distribution of telecommunication products, including antenna and cable.
CommScope EMEA Ltd. Corke Abbey Avenue Bray County Dublin A98FY03 Ireland	Manufacture and distribution of telecommunication products, including cable and connectors.
CommScope Telecommunications (China) Co., Ltd. 68 West Su Hong Xi Lu Suzhou Industrial Park Suzhou Jiangsu 215021 China	Manufacture and distribution of telecommunication products, including antenna and cables.

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 2 of 5

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Information and Contact: BSI, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP. Tel: + 44 345 080 9000  
BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.  
A Member of the BSI Group of Companies.



Certificate No: **EMS 648387**

Location	Registered Activities
Andrew Wireless Systems GmbH Industriering 10 Buchdorf 86675 Germany	Manufacture and distribution of telecommunication products, including amplifiers and antenna systems.
CommScope, Inc. of North Carolina 1100 CommScope Place SE Hickory North Carolina 28603-0339 USA	Corporate headquarters responsible for management system oversight of all locations listed on this certificate.
CommScope Inc. 6519 CommScope Road Catawba North Carolina 28609-0199 USA	Manufacture and distribution of telecommunication products, including cable.
CommScope Inc. 3642 US Hwy 70 East Claremont North Carolina 28610-0879 USA	Manufacture and distribution of telecommunication products, including cable.
CommScope Czech Republic s.r.o. Turanka 98B Brno 62700 Czech Republic	Manufacture and distribution of telecommunication products, including connectors and terminations.
CommScope Inc. of North Carolina 1100 CommScope Place SE Hickory North Carolina 28603-0339 USA	Customer care, facility maintenance, and administrative functions.
ADC de Delicias, S. de R.L. de C.V. Blvd. Fernando Baeza No. 1301 Sur Delicias Chihuahua 33000 Mexico	Manufacturing and distribution of telecommunication products.

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 3 of 5

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Certificate No: **EMS 648387**

Location	Registered Activities
ADC de Juarez S. de R.L. de C.V. Parque Industrial Antonio J Bermudez Ciudad Juarez Chihuahua 32470 Mexico	Manufacturing and distribution of telecommunication products.
CommScope Connectivity Belgium bvba Diestsesteenweg 692 Kessel-lo 3010 Belgium	Manufacture and distribution of telecommunication products.
CommScope Technologies de Juarez S. de R.L. de C.V. Santiago Troncoso 331 Praderas del Sur, Ciudad Juarez Chihuahua 32575 Mexico	Manufacture of Fiber Optic Splice Closures (FOSC), Fiber Guide Systems (FGS), Hardened Connectivity and Molding-Gel Filling, including: plastic injection molding, plastic extrusion, plastic and metal machining, and assembly operations.
CommScope Connectivity UK Limited Unit 1 Kinmel Park Bodelwyddan Rhyl, Denbighshire LL18 5TZ United Kingdom	Fibre optic cable manufacturing, termination and design of other telecommunication products and services.
CommScope 11312 S. Pipeline Road Euless Texas 76040 USA	Manufacture, distribution, field support and central function of telecommunication products.
ARRIS GROUP DE MEXICO SA DE CV Av. De la Paz, #11721 Parque Industrial Pacifico Tijuana Baja California 22643 Mexico	Manufacture, repair, support, repair service, distribution of products and components for telecommunications that provide integrated solutions for voice, video and data through the processes of SMT, manual and mechanical assembly, soldering (manual, selective, printed, wave) electrical testing and packaging.

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 4 of 5

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BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.

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Certificate No: **EMS 648387**

Location	Registered Activities
CommScope Design & Integration UK Ltd Unit 5 & 6, Eden Business Park Edenhouse Drive Old Malton Malton YO17 6AE United Kingdom	Manufacture and distribution of telecommunications products including cabinets.
Arris Indústria Eletrônica do Brasil Ltda. CNPJ: 09.154.836/0001-15 Avenida Torquato Tapajós, 9475 Tarumã Manaus Amazonas 69041-025 Brasil	Manufacturer and distribution of Receivers, Television signal Decoders and Modulator/Router.
CommScope Design and Integration UK Ltd. Lovell House, 412 The Quadrant Birchwood Park Warrington WA3 6FW United Kingdom	Telecommunications project management, site surveys, installations commissioning and rigging.

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 5 of 5

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# CERTIFICATE

Certificate Number: 151045.000

TLID: TL1786

With Five Page Addendum

The Quality Management System and implementation of:

**CommScope, Inc.**

With Virtual Central Function at:

1100 CommScope Place SE

Hickory, NC 28602

United States

meets the requirements of the standard:

## TL 9000 – H, S, V R6.2/R5.6 (Based on and including ISO 9001:2015)

### Scope:

The sales, marketing, design, manufacture, test, repair, support, service, and distribution of telecommunications products, components, and services for the telecommunications, wireless, and broadcast networks industries

Product Categories	Products
3.2.5 Fiber to the User	ASWXXXX, OLT (GPON)
3.2.6.2 Video Transmission Equipment	EQAM Products (APEX, SFP), Switched Digital Video and Resource Mgmt, Network Encryption (NE), ALOHA Interactive (ARPD, ADM, SDM), Cablevista Edge Decoder, Conditional Access Products
4.2.2.1 On line Non-critical	ECO Edge, ECO Service Management
6.2.5 Passive Optical Network Termination Units	ONT-1xxxx, ONT1xxx
6.2.6.1 Set Top Box	Digital Video Set Tops (VMS Series , IPC series)
3.1.1.1.1 Metallic Conductor Cable	All Products
3.1.1.1.2 Metallic Connectors	All Products
3.1.1.2.1 Fiber Optic Cable	All Products
3.1.1.2.2 Optical Connector	All Products
3.1.1.3.2 Passive Optical Subsystems	All Products
3.1.1.3.4.1 Radio Antenna Systems	All Products
3.1.2.1 Enclosures	All Products
3.1.2.3 Conduit	All Products
3.2.1.1 Manual Cross Connect Systems	All Products
8.1.4 Mechanical and Electromechanical	All Products
8.3 Cable Assemblies	All Products

**Certification Structure:** Multi-site

Certificate Expires: January 04, 2023

Certificate Reissued: September 03, 2021

Certificate Issued: January 05, 2021

Certified Since: August 8, 1994



Dr. Cem O. Onus  
Managing Director, Business Assurance  
DEKRA Certification, Inc.

1120 Welsh Road, Suite 210  
North Wales, PA 19454 USA  
(215) 997-4519

[dekra-certification.us](http://dekra-certification.us)





# CERTIFICATE ADDENDUM

Certificate Number: 151045.000

ADDENDUM Page One of Five

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**TL 9000 – H, S, V R6.2/R5.6**  
**(Based on and including ISO 9001:2015)**

<b>Site Activities Legend:</b>	HQ = Headquarters	MFG = Manufacturing	SER = Services, (Professional Services and/or Technical Support)
	HW DE= Hardware Development	REP = Repair	SC = Purchasing, Supplier Management, Manufacturing Support, Repair Support
	SW DE= Software Development	SAL = Sales, Marketing	

Site Address	Certification	Product Category	Site Activities
CommScope, Inc 1100 CommScope Place SE Hickory, NC 28602 United States	TL9000HSV	3.1.1.1.1, 3.1.1.1.2, 3.1.1.2.1, 3.1.1.2.2, 3.1.1.3.2, 3.1.1.3.4.1, 3.1.2.1, 3.1.2.3, 3.2.1.1, 3.2.5, 3.2.6.24.2.2.1, 6.2.5, 6.2.6.1, 8.1.4, 8.3	HQ (Virtual)
ARRIS Technology, Inc. 101 Tournament Dr. Horsham, PA 19044 United States	TL9000HSV	3.2.6.2, 6.2.6.1	HW & SW DE, SAL, SER, SC
ARRIS Technology, Inc. 900 Chelmsford St. Lowell, MA 01851 United States	TL9000HSV	3.2.5, 3.2.6.2, 6.2.5, 6.2.6.1	HW & SW DE, SAL, SER, SC

Certificate Expires: January 04, 2023  
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# CERTIFICATE ADDENDUM

Certificate Number: 151045.000  
ADDENDUM Page Two of Five

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**TL 9000 – H, S, V R6.2/R5.6**  
**(Based on and including ISO 9001:2015)**

<u>Site Address</u>	<u>Certification</u>	<u>Product Category</u>	<u>Site Activities</u>
ARRIS Technology, Inc. 6450 Sequence Drive San Diego, CA 92121 United States	TL9000HSV	3.2.6.2, 6.2.6.1	HW & SW DE, SAL, SER, SC
ARRIS Solutions, Inc. 2400 Ogden Ave., Suite 180 Lisle, IL 60532 United States	TL9000H	3.1.1.1.2, 3.2.5, 3.2.6.2, 6.2.5, 6.2.6.1, 8.3	SC, HW DE, SAL
ARRIS Technology, Inc. 2450/2500 Walsh Avenue Santa Clara, CA 95051 United States	TL9000SV	3.2.6.2	SER, SC
ARRIS Solutions, Inc. 4516 Seton Center Parkway Suite 185 Austin, Texas 78759	TL9000SV	4.2.2.1	SW DE, SER
ARRIS Technology (Shenzhen) Co., Ltd. South & East Wing, 4F, Block 2 Vision (Shenzhen) Business Park Shenzhen P.R. China	TL9000S	3.2.6.2	SW DE
ARRIS Technology (Hangzhou) Company Limited, Beijing Branch No. 1 Wang Jing East Road Chao Yang Dist. 100102 Beijing, P.R. China	TL9000V	3.2.5, 3.2.6.2, 6.2.5, 6.2.6.1	SER, SAL, SC
ARRIS Solutions UK Limited 710 Wharfedale Road IQ Winnersh Wokingham Berkshire RG41 5TP United Kingdom	TL9000V	3.2.5, 3.2.6.2, 6.2.5, 6.2.6.1	SAL, SER

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# CERTIFICATE ADDENDUM

Certificate Number: 151045.000  
ADDENDUM Page Three of Five

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

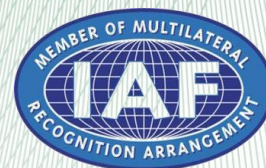
**TL 9000 – H, S, V R6.2/R5.6**  
**(Based on and including ISO 9001:2015)**

Site Address	Certification	Product Category	Site Activities
ARRIS de Mexico, SA de C.V. Via de la Innovacion # 402; CP 66628 Parque de Investigacion e Innovacion Tecnologica Apodaca Nuevo León; Mexico	TL9000HS	3.2.5, 3.2.6.2, 6.2.5, 6.2.6.1	HW & SW DE, REP
ARRIS Group de Mexico S.A. de C.V. Av. La Paz 11721 Parque Industrial Pacifico Tijuana, BC 22643 Mexico	TL9000H	3.1.1.3.4.1, 3.2.6.2, 3.2.5	MFG SC, REP
CommScope Technologies LLC 2601 Telecom Parkway Richardson, TX 75082 United States	TL9000H	3.1.1.3.4.1, 3.1.2.1	HW DE
CommScope Telecommunications (China) Co. Ltd. No. 68 Su Hong XI Lu Suzhou Industrial Park, Suzhou Jiangsu 215021 Peoples Republic of China	TL9000H	3.1.1.1.1, 3.1.1.2, 3.1.1.3.4.1, 8.3	HW DE, MFG
CommScope Connectivity (Suzhou) Co. Ltd. 77 Qiming Road, Suzhou Industrial Park Suzhou, Jiangsu 215121 Peoples Republic of China	TL9000H	3.1.1.3.2, 3.1.1.2.2, 3.1.1.1.2, 3.2.1.1., 8.3	HW DE, MFG
Andrew Wireless Systems GmbH Industriering 10 Buchdorf Bavaria 86675 GERMANY	TL9000H	3.1.1.3.4.1	HE DE, REP, MFG

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# CERTIFICATE ADDENDUM

Certificate Number: 151045.000  
ADDENDUM Page Four of Five

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**TL 9000 – H, S, V R6.2/R5.6**  
**(Based on and including ISO 9001:2015)**

<u>Site Address</u>	<u>Certification</u>	<u>Product Category</u>	<u>Site Activities</u>
CommScope India Private Ltd Plot No. N-2, Verna Industrial Estate Phase IV, Verna - Salcette, GOA 403 722 INDIA	TL9000H	3.1.1.1.1, 3.1.1.1.2, 3.1.1.3.4.1, 8.3	HW DE, MFG
CommScope Italy srl Via Mengolina 20, Faenza Ravenna 48018 Italy	TL9000H	3.1.1.3.4.1	HW DE
Andrew Telecommunications de Reynosa, S. De R.L. de C. V. Ave. Industrial Reynosa Lote 2 al 5, Col Parque Industrial Reynosa, Reynosa Tamaulipas 88780 Mexico	TL9000H	3.1.1.3.4.1, 3.1.1.1.2, 3.1.2.1, 8.3	MFG
CommScope Corporation Mexico, S.A. de C.V. CCS Ave. Antonio J. Bermudez #550 Parque Ind. A. J. Bermudez Ciudad Juarez CHIH 32470 Mexico	TL9000H	3.1.1.3.2, 3.1.1.2.2, 3.1.2.3, 3.2.1.1, 8.3	HW DE, MFG
CommScope Corporation Mexico, S.A. de C.V. Santiago Troncoso No. 331, Cd. Juarez CHIH 32599 Mexico	TL9000H	3.1.1.3.2, 3.1.1.2.2, 3.1.2.3, 3.2.1.1, 8.3	MFG
ADC de Delicias S. De R.L. de C.V Boulevard Fernando Baeza #1301 Fraccionamiento San Marcos Ciudad Delicias Mexico	TL9000H	3.1.1.3.2, 3.1.1.2.2, 3.1.2.3, 3.2.1.1, 8.3	MFG
CommScope Technologies UK Ltd Lomond House, Grantsmuir John Smith Business Park Kirkcaldy, Fife KY2 6NA Scotland	TL9000H	8.1.4	HW DE, SAL

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# CERTIFICATE ADDENDUM

Certificate Number: 151045.000  
ADDENDUM Page Five of Five

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**TL 9000 – H, S, V R6.2/R5.6**  
**(Based on and including ISO 9001:2015)**

<u>Site Address</u>	<u>Certification</u>	<u>Product Category</u>	<u>Site Activities</u>
CommScope Inc of North Carolina 1130 Classic Rd Apex, NC 27539 United States	TL9000H	3.1.1.2.2	HW DE, SAL
CommScope Technologies LLC 140 Vista Centre Drive Forest, VA 24551 United States	TL9000H	3.1.1.3.4.1	HW DE, SW DE
CommScope Technologies LLC 19700 Janelia Farm Blvd Ashburn, VA 21047 United States	TL9000H	3.1.1.3.4.1	HW & SW DE, REP
CommScope Technologies LLC 11312 S. Pipeline Road Eules, TX 76040 United States	TL9000H	8.1.4	HW DE, MFG, SAL
CommScope Connectivity LLC 501 Shenandoah Drive Shakopee MN 55379 United States	TL9000	3.1.1.3.2, 3.1.1.2.2, 3.1.2.2.3, 3.2.1.1, 8.3	HW DE, SAL, SER, SC, SW DE
CommScope Inc of North Carolina 6519 CommScope Road, Catawba, NC 28609-0199 United States	TL9000	3.1.1.1.1, 3.1.1.1.2	HW DE, MFG, SAL
CommScope Inc of North Carolina 3642 US Hwy. 70 East Claremont NC 28610 United States	TL9000	3.1.1.1.1, 3.1.1.2.2, 3.1.1.2.1	HW DE, MFG, SAL

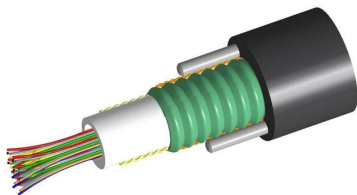
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Fiber OSP cable, TeraSPEED® Single Jacket/Single Armor, Gel-Filled, 6 fibers, Outdoor Central Tube, Singlemode G.652.D and G.657.A1, Feet jacket marking, Black jacket color

- Corrugated steel tape armor is strong yet flexible, providing additional crush and rodent protection

## Product Classification

Regional Availability	Asia   Australia/New Zealand   EMEA   Latin America   North America
Portfolio	CommScope®
Product Type	Fiber OSP cable
Product Series	O-CA

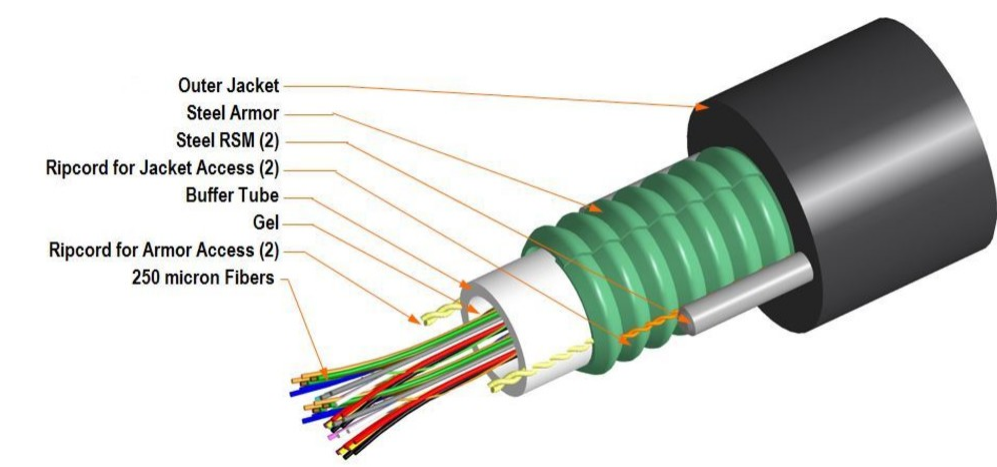
## General Specifications

Armor Type	Corrugated steel
Cable Type	Central loose tube
Construction Type	Armored
Fiber Type, quantity	6
Fibers per Subunit, quantity	6
Jacket Color	Black
Jacket Marking	Feet
Subunit Type	Gel-filled
Subunit, quantity	1
Total Fiber Count	6

## Dimensions

Buffer Tube/Subunit Diameter	4 mm   0.157 in
Diameter Over Jacket	11 mm   0.433 in

## Representative Image



Material Specifications

Jacket Material

PE

Mechanical Specifications

Minimum Bend Radius, loaded	165 mm   6.496 in
Minimum Bend Radius, unloaded	110 mm   4.331 in
Tensile Load, long term, maximum	800 N   179.847 lbf
Tensile Load, short term, maximum	2700 N   606.984 lbf
Compression	44 N/mm   251.246 lb/in
Compression Test Method	FOTP-41   IEC 60794-1 E3
Flex	25 cycles
Flex Test Method	FOTP-104   IEC 60794-1 E6
Impact	2.94 N-m   26.021 in lb
Impact Test Method	FOTP-25   IEC 60794-1 E4
Strain	See long and short term tensile loads
Strain Test Method	FOTP-33   IEC 60794-1 E1
Twist	10 cycles
Twist Test Method	FOTP-85   IEC 60794-1 E7
Vertical Rise, maximum	607 m   1,991.47 ft

Optical Specifications

Fiber Type

G.652.D and G.657.A1, TeraSPEED® | OS2

## Environmental Specifications

Installation temperature	-30 °C to +70 °C (-22 °F to +158 °F)
Operating Temperature	-40 °C to +70 °C (-40 °F to +158 °F)
Storage Temperature	-40 °C to +75 °C (-40 °F to +167 °F)
Cable Qualification Standards	ANSI/ICEA S-87-640   EN 187105   Telcordia GR-20
Environmental Space	Aerial, lashed   Buried
Jacket UV Resistance	UV stabilized
Water Penetration	24 h
Water Penetration Test Method	FOTP-82   IEC 60794-1 F5

## Environmental Test Specifications

Cable Freeze	-2 °C   28.4 °F
Cable Freeze Test Method	FOTP-98   IEC 60794-1 F15
Drip	70 °C   158 °F
Drip Test Method	FOTP-81   IEC 60794-1 E14
Heat Age	-40 °C to +85 °C (-40 °F to +185 °F)
Heat Age Test Method	IEC 60794-1 F9
Low High Bend	-30 °C to +60 °C (-22 °F to +140 °F)
Low High Bend Test Method	FOTP-37   IEC 60794-1 E11
Temperature Cycle	-40 °C to +70 °C (-40 °F to +158 °F)
Temperature Cycle Test Method	FOTP-3   IEC 60794-1 F1

## Packaging and Weights

Cable weight	135 kg/km   90.716 lb/kft
--------------	---------------------------

## Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a>
ROHS	Compliant
UK-ROHS	Compliant





## Included Products

CS-8W-LT – TeraSPEED® G652D/G657A1 Singlemode  
Fiber

## \* Footnotes

**Operating Temperature** Specification applicable to non-terminated bulk fiber cable

TeraSPEED®

Product Classification

Portfolio	CommScope®
Product Type	Optical fiber

General Specifications

Cladding Diameter	125 µm
Cladding Diameter Tolerance	±0.7 µm
Cladding Non-Circularity, maximum	0.7 %
Coating Diameter (Colored)	249 µm
Coating Diameter (Uncolored)	242 µm
Coating Diameter Tolerance (Colored)	±13 µm
Coating Diameter Tolerance (Uncolored)	±5 µm
Coating/Cladding Concentricity Error, maximum	12 µm
Core Diameter	8.3 µm
Core/Clad Offset, maximum	0.5 µm
Proof Test	689.476 N/mm²   100000 psi

Dimensions

Fiber Curl, minimum	4 m   13.123 ft
---------------------	-----------------

Mechanical Specifications

Macrobending, 20 mm Ø mandrel, 1 turn	0.75 dB @ 1,550 nm   1.50 dB @ 1,625 nm
Macrobending, 30 mm Ø mandrel, 10 turns	0.25 dB @ 1,550 nm   1.00 dB @ 1,625 nm
Macrobending, 60 mm Ø mandrel, 100 turns	0.05 dB @ 1,550 nm   0.05 dB @ 1,625 nm
Coating Strip Force, maximum	8.9 N   2.001 lbf

# CS-8W-LT

Coating Strip Force, minimum	1.3 N   0.292 lbf
Dynamic Fatigue Parameter, minimum	20

## Optical Specifications

Cabled Cutoff Wavelength, maximum	1260 nm
Point Defects, maximum	0.1 dB
Zero Dispersion Slope, maximum	0.092 ps/[km-nm-nm]
Zero Dispersion Wavelength, maximum	1324 nm
Zero Dispersion Wavelength, minimum	1300 nm

## Optical Specifications, Wavelength Specific

Attenuation, maximum	0.22 dB/km @ 1,550 nm   0.25 dB/km @ 1,490 nm   0.25 dB/km @ 1,625 nm   0.36 dB/km @ 1,310 nm   0.36 dB/km @ 1,385 nm
Attenuation, typical	0.19 dB/m @ 1,550 nm   0.33 dB/m @ 1,310 nm
Backscatter Coefficient	-79.6 dB @ 1,310 nm   -82.1 dB @ 1,550 nm
Dispersion, maximum	18 ps(nm-km) at 1550 nm   3.5 ps(nm-km) from 1285 nm to 1330 nm at 1310 nm
Index of Refraction	1.467 @ 1,310 nm   1.467 @ 1,385 nm   1.468 @ 1,550 nm
Mode Field Diameter	10.4 $\mu$ m @ 1,550 nm   9.2 $\mu$ m @ 1,310 nm   9.6 $\mu$ m @ 1,385 nm
Mode Field Diameter Tolerance	$\pm$ 0.4 $\mu$ m @ 1310 nm   $\pm$ 0.5 $\mu$ m @ 1550 nm   $\pm$ 0.6 $\mu$ m @ 1385 nm
Polarization Mode Dispersion Link Design Value, maximum	0.04 ps/sqrt(km)
Standards Compliance	IEC 60793-2-10, edition 6, model A1a.4   ITU-T G.652.D   ITU-T G.657.A1   TIA-492CAAB (OS2)

## Environmental Specifications

Heat Aging, maximum	0.05 dB/km @ 85 °C
Temperature Dependence, maximum	0.05 dB/km
Temperature Humidity Cycling, maximum	0.05 dB/km
Water Immersion, maximum	0.05 dB/km @ 23 °C

## Regulatory Compliance/Certifications

Agency	Classification
--------	----------------



# CS-8W-LT

ISO 9001:2015

Designed, manufactured and/or distributed under this quality management system



## \* Footnotes

<b>Temperature Dependence, maximum</b>	Temperature dependence is conducted at -60 °C to +85 °C (-76 °F to +185 °F)
<b>Temperature Humidity Cycling, maximum</b>	Temperature humidity cycling is conducted at -10 °C to +85 °C (+14 °F to +185 °F) up to 95% relative humidity



August 2, 2016

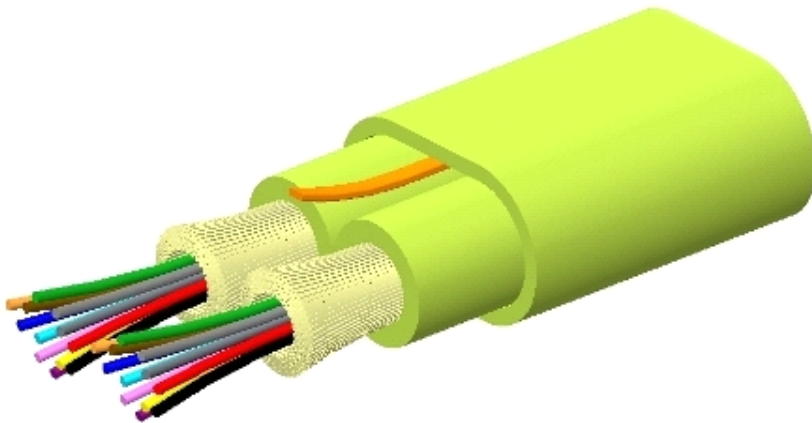
## CommScope WBMMF Testing Certified by Intertek

*-Believed to be industry's first confirmed successful test of wavelengths beyond 850 nm-*

HICKORY, N.C.--(BUSINESS WIRE)-- [Wideband multimode fiber \(WBMMF\)](#) is an innovative solution allowing IT and data center managers to build cost effective infrastructure that can support bandwidth needs today and in the future.

This Smart News Release features multimedia. View the full release here:

<http://www.businesswire.com/news/home/20160802005263/en/>



Intertek, a leading total quality assurance provider to industries worldwide, recently certified CommScope's WBMMF testing facility in Richardson, Texas for its measurement setup and technique. (Photo: Business Wire)

"This testing and certification validates CommScope's commitment to its state-of-the-art DMD testing capability that is critical for new product development," said David Brown, senior vice president, Research and Development, CommScope. "With Intertek as our witness, our certified testing will increase customer confidence in our laboratory measurements."

Brown added the certification allows CommScope to continue developing its innovative WBMMF solutions. This, coupled with transceivers using wavelength division multiplexing and/or pulse-amplitude modulation technology, provides a path for CommScope customers to grow their fiber throughput capacity from 10G to 100G and beyond with maximum fiber reach and minimum fiber count, enabling them to cost-effectively keep pace with the bandwidth explosion.

"Our customers and the industry expect leadership from CommScope and we are doing that by providing innovative, certified solutions that adhere to important industry standards," Brown said.

"Intertek is pleased to provide its expertise in certifying standards compliance to the DMD bench at CommScope's facility," said Antoine Pelletier, project engineer, Intertek. "CommScope's DMD bench met the measurement standard's requirements and properly graded the performance of fibers used in CommScope's [LazrSPEED®](#) cables with respect to the TIA-492 series requirements."

Click [here](#) to download the Intertek witness report.

### Related Blog Posts and Videos:

[The Impact of SWDM over Multimode Fiber](#)

[How to Achieve High Efficiency in Connectivity](#)

[The Next Generation of Multimode Fiber](#)

[Intertek](#), a leading total quality assurance provider to industries worldwide, [recently certified](#) CommScope's WBMMF testing facility in Richardson, Texas for its measurement setup and technique stating "it satisfies the current [Telecommunication Industry Association's](#) (TIA) standard (TIA-455-220-A)."

Intertek witnessed CommScope's differential mode delay (DMD) testing of WBMMF at 850, 880, 910 and 953 nm. This marks what CommScope believes to be the industry's first confirmed successful test of wavelengths beyond 850 nm, an important step in verifying fiber performance for emerging shortwave wavelength division multiplexing systems. The fibers also met the TIA-492AAAC, TIA-492AAD and TIA-492AAAE standards, Intertek stated.

[Next Generation Multimode Fiber Gains Support](#)

[The Arrival of WideBand Multimode Fiber](#)

[The Widening Horizon for Multimode Fiber in Buildings and Data Centers](#)

[Ethernet, the Road Ahead](#)

[VIDEO: LazrSPEED WideBand Multimode Fiber by CommScope](#)

[VIDEO: Wideband Multimode Fiber - What is it and why does it make sense?](#)

[VIDEO: CommScope Engineering Fellow talks next-gen fiber](#)

*LazrSPEED is a registered trademark of CommScope, Inc.*

## **About CommScope**

[CommScope](#) (NASDAQ: COMM) helps companies around the world design, build and manage their wired and wireless networks. Our vast portfolio of network infrastructure includes some of the world's most robust and innovative wireless and fiber optic solutions. Our talented and experienced global team is driven to help customers increase bandwidth; maximize existing capacity; improve network performance and availability; increase energy efficiency; and simplify technology migration. You will find our solutions in the largest buildings, venues and outdoor spaces; in data centers and buildings of all shapes, sizes and complexity; at wireless cell sites; in telecom central offices and cable headends; in FTTx deployments; and in airports, trains, and tunnels. Vital networks around the world run on CommScope solutions.

Follow us on [Twitter](#), [LinkedIn](#) and [Instagram](#), and like us on [Facebook](#).

Sign up for our [press releases](#) and [blog posts](#).

This press release includes forward-looking statements that are based on information currently available to management, management's beliefs, as well as on a number of assumptions concerning future events. Forward-looking statements are not a guarantee of performance and are subject to a number of uncertainties and other factors, which could cause the actual results to differ materially from those currently expected. In providing forward-looking statements, the company does not intend, and is not undertaking any obligation or duty, to update these statements as a result of new information, future events or otherwise.

View source version on [businesswire.com](#): <http://www.businesswire.com/news/home/20160802005263/en/>

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+1 828-323-4970

Source: CommScope

News Provided by Acquire Media



# CERTIFICATE

Certificate Number: 151045.000

TLID: TL1786

With Eight Page Addendum

The Quality Management System and implementation of:

## CommScope, Inc.

With Virtual Central Function at:

1100 CommScope Place SE

Hickory, NC 28602

United States

meets the requirements of the standard:

## TL 9000 – H, S, V R6.3/R5.7 (Based on and including ISO 9001:2015)

### Scope:

The sales, marketing, design, manufacture, test, repair, support, service, and distribution of telecommunications products, components, and services for the telecommunications, wireless, and broadcast networks industries

Product Categories	Products
3.2.5 Fiber to the User	ASWXXXX, OLT (GPON)
3.2.6 Video Transmission Equipment	EQAM Products (APEX, SFP), Switched Digital Video and Resource Mgmt, Network Encryption (NE), ALOHA Interactive (ARPD, ADM, SDM), Cablevista Edge Decoder, Conditional Access Products
6.2.5 Passive Optical Network Termination Units	ONT-1xxxx, ONT1xxx
3.1.1.1.1 Metallic Conductor Cable	All Products
3.1.1.1.2 Metallic Connectors	All Products
3.1.1.2.1 Fiber Optic Cable	All Products
3.1.1.2.2 Optical Connector	All Products
3.1.1.3.2 Passive Optical Transmission Subsystems	All Products
3.1.1.3.4 Fixed Antenna Systems	All Products
3.1.2.1 Enclosures	All Products
3.1.2.3 Conduits	All Products
3.2.1.1 Manual Cross Connect Systems	All Products
8.1.4 Electromechanical Components	All Products
8.3 Cable Assemblies	All Products

**Certification Structure:** Multi-site

Certificate Expires: January 04, 2026

Certificate Issued: January 05, 2023

Certified Since: August 08, 1994



Dr. Cem O. Onus  
Managing Director

DEKRA Certification, Inc.

1945 The Exchange SE #300

Atlanta, GA 30339 USA

(215) 997-4519

[dekra-certification.us](http://dekra-certification.us)





# CERTIFICATE ADDENDUM

Certificate Number: 151045.000

ADDENDUM Page One of Eight

The Quality Management System and implementation of:

## CommScope, Inc.

meets the requirements of the standard:

## TL 9000 – H, S, V R6.3/R5.7

(Based on and including ISO 9001:2015)

<b>Site Activities Legend:</b>	HQ = Headquarters	MFG = Manufacturing	SER = Services, (Professional Services and/or Technical Support)
	HW DE= Hardware Development	REP = Repair	SC = Purchasing, Supplier Management, Manufacturing Support, Repair Support
	SW DE= Software Development	SAL = Sales, Marketing	

Site Address	Certification	Product Category	Site Activities
CommScope, Inc 1100 CommScope Place SE Hickory, NC 28602 United States	TL9000HSV	3.1.1.1.1, 3.1.1.1.2, 3.1.1.2.1, 3.1.1.2.2, 3.1.1.3.2, 3.1.1.3.4, 3.1.2.1, 3.1.2.3, 3.2.1.1, 3.2.5, 3.2.6, 6.2.5, 8.1.4, 8.3	HQ (Virtual)
ARRIS Technology, Inc. 900 Chelmsford St. Lowell, MA 01851 United States	TL9000HSV	3.2.5, 3.2.6, 6.2.5, 3.1.1.3.4	HW & SW DE, SER, SC
ARRIS Technology, Inc. 6450 Sequence Drive San Diego, CA 92121 United States	TL9000SV	3.2.6	SW DE, SER
ARRIS Solutions, Inc. 2400 Ogden Ave., Suite 180 Lisle, IL 60532 United States	TL9000H	3.1.1.1.2, 3.2.5, 3.2.6, 6.2.5, 8.3	HW DE, SAL, SC

Certificate Expires: January 04, 2026

Certificate Issued: January 05, 2023

Certified Since: August 08, 1994



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# CERTIFICATE ADDENDUM

Certificate Number: 151045.000  
ADDENDUM Page Two of Eight

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**TL 9000 – H, S, V R6.3/R5.7**  
**(Based on and including ISO 9001:2015)**

<u>Site Address</u>	<u>Certification</u>	<u>Product Category</u>	<u>Site Activities</u>
ARRIS STB de Mexico, SA de C.V. Via de la Innovacion # 402; CP 66628 Parque de Investigacion e Innovacion Tecnologica Apodaca Nuevo León; Mexico	TL9000HSV	3.2.5, 3.2.6, 6.2.5	HW & SW DE, REP
ARRIS Group de Mexico S.A. de C.V. Av. La Paz 11721 Parque Industrial Pacifico Tijuana, BC 22643 Mexico	TL9000HV	3.1.1.3.4, 3.2.6, 3.2.5	MFG SC, REP
CommScope Technologies LLC 2601 Telecom Parkway Richardson, TX 75082 United States	TL9000H	3.1.1.3.4, 3.1.2.1	HW DE, SER
CommScope Telecommunications (China) Co. Ltd. No. 68 Su Hong XI Lu Suzhou Industrial Park, Suzhou Jiangsu 215021 Peoples Republic of China	TL9000H	3.1.1.1.1, 3.1.1.1.2, 3.1.1.3.4, 8.3	HW DE, MFG, SC,
CommScope Connectivity (Suzhou) Co. Ltd. 77 Qiming Road, Suzhou Industrial Park Suzhou, Jiangsu 215121 Peoples Republic of China	TL9000H	3.1.1.3.2, 3.1.1.2.2, 3.1.1.1.2, 3.2.1.1, 8.3	MFG, SC

Certificate Expires: January 04, 2026  
Certificate Issued: January 05, 2023  
Certified Since: August 08, 1994



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# CERTIFICATE ADDENDUM

Certificate Number: 151045.000  
ADDENDUM Page Three of Eight

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**TL 9000 – H, S, V R6.3/R5.7**  
**(Based on and including ISO 9001:2015)**

<u>Site Address</u>	<u>Certification</u>	<u>Product Category</u>	<u>Site Activities</u>
Andrew Wireless Systems GmbH Industriering 10 Buchdorf Bavaria 86675 GERMANY	TL9000HV	3.1.1.3.4	HW DE, REP, MFG
CommScope India Private Ltd Plot No. N-2, Verna Industrial Estate Phase IV, Verna - Salcette, GOA 403 722 INDIA	TL9000H	3.1.1.1.1, 3.1.1.1.2, 3.1.1.3.4, 8.3	HW DE, MFG, SC
CommScope Italy srl Via Mengolina 20, Faenza Ravenna 48018 Italy	TL9000H	3.1.1.3.4	HW DE
Andrew Telecommunications de Reynosa, S. De R.L. de C. V. Ave. Industrial Reynosa Lote 2 al 5, Col Parque Industrial Reynosa, Reynosa Tamaulipas 88780 Mexico	TL9000H	3.1.1.3.4, 3.1.1.1.2, 3.1.2.1, 8.3	MFG
CommScope Corporation Mexico, S.A. de C.V. CCS Ave. Antonio J. Bermudez #550 Parque Ind. A. J. Bermudez Ciudad Juarez CHIH 32470 Mexico	TL9000H	3.1.1.3.2, 3.1.1.2.2, 3.1.2.3, 3.2.1.1, 8.3	HW DE, MFG
CommScope Corporation Mexico, S.A. de C.V. Santiago Troncoso No. 331, Cd. Juarez CHIH 32599 Mexico	TL9000H	3.1.1.3.2, 3.1.1.2.2, 3.1.2.3, 3.2.1.1, 8.3	MFG
ADC de Delicias S. De R.L. de C.V Boulevard Fernando Baeza #1301 Fraccionamiento San Marcos Ciudad Delicias Mexico	TL9000H	3.1.1.3.2, 3.1.1.2.2, 3.1.2.3, 3.2.1.1, 8.3	MFG

Certificate Expires: January 04, 2026  
Certificate Issued: January 05, 2023  
Certified Since: August 08, 1994



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# CERTIFICATE ADDENDUM

Certificate Number: 151045.000  
ADDENDUM Page Four of Eight

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**TL 9000 – H, S, V R6.3/R5.7**  
**(Based on and including ISO 9001:2015)**

<u>Site Address</u>	<u>Certification</u>	<u>Product Category</u>	<u>Site Activities</u>
CommScope Technologies UK Ltd Lomond House, Grantsmuir John Smith Business Park Kirkcaldy, Fife KY2 6NA Scotland	TL9000H	8.1.4	HW DE, SAL
CommScope Inc of North Carolina 1130 Classic Rd Apex, NC 27539 United States	TL9000H	3.1.1.2.2	HW DE, SAL
CommScope Technologies LLC 11312 S. Pipeline Road Euless, TX 76040 United States	TL9000H	8.1.4	HW DE, MFG, SAL
CommScope Connectivity LLC 501 Shenandoah Drive Shakopee MN 55379 United States	TL9000HSV	3.1.2.3 3.1.1.2.2, 3.1.1.3.2, 3.2.1.1, 8.3	HW DE, SAL, SER, SC,
CommScope Inc of North Carolina 6519 CommScope Road, Catawba, NC 28609-0199 United States	TL9000H	3.1.1.1.1, 3.1.1.1.2	HW DE, MFG, SAL
CommScope Inc of North Carolina 3642 US Hwy. 70 East Claremont NC 28610 United States	TL9000H	3.1.1.1.1, 3.1.1.2.1	HW DE, MFG, SAL

Certificate Expires: January 04, 2026  
Certificate Issued: January 05, 2023  
Certified Since: August 08, 1994



Dr. Cem O. Onus  
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# CERTIFICATE ADDENDUM

Certificate Number: 151045.000  
TLID: TL1786  
ADDENDUM Page Five of Eight

The Quality Management System and implementation of:

**CommScope, Inc.**

With site:

**CommScope Connectivity (Suzhou) Co. Ltd.**

77 Qiming Road, Suzhou Industrial Park

Suzhou, Jiangsu 215121

Peoples Republic of China

meets the requirements of the standard:

## TL 9000 – H R6.3/R5.7 (Based on and including ISO 9001:2015)

The validity of this certificate depends on the validity of the main certificate.

### Scope:

Manufacture metallic connectors, fiber optical jumpers and connectors, passive optical transmission sub - systems, enclosures, cable assemblies, fiber connection enclosures and communication cabinets

Product Categories	
3.1.1.1.2	Metallic Connectors
3.1.1.2.2	Optical Connector
3.1.1.3.2	Passive Optical Subsystems
3.2.1.1	Manual Cross Connect Systems
8.3	Cable Assemblies

**Certification Structure:** Multi-site

Certificate Expires: January 04, 2026  
Certificate Issued: January 05, 2023  
Certified Since: August 08, 1994



Dr. Cem O. Onus  
Managing Director

DEKRA Certification, Inc.  
1945 The Exchange SE #300  
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[dekra-certification.us](http://dekra-certification.us)





# 证书附录

证书编号: 151045.000

TLID: TL1786

附录第 6 页, 共 8 页

质量管理体系和实施:

**CommScope, Inc.**

其场所:

**康普通联通信 (苏州) 有限公司**

苏州工业园区启明路 77 号

江苏苏州 215121

中华人民共和国

符合以下标准要求:

**TL 9000 – H R6.3/R5.7**  
**(基于并包括 ISO 9001:2015)**

本证书的有效性取决于主证书的有效性。

**范围:**

金属连接器, 光纤跳线及连接器, 无源光传输子系统, 附件, 电缆组件, 光缆接头盒, 通讯机柜的生产

产品类别	
3.1.1.1.2	金属连接器
3.1.1.2.2	光学连接器
3.1.1.3.2	无源光学子系统
3.2.1.1	手动交叉连接系统
8.3	电缆组件

**认证结构: 多场所**

证书有效期: 2026.1.4

发证日期: 2023.1.5

首次发证日期: 2021.1.5



Dr. Cem O. Onus  
Managing Director

DEKRA Certification, Inc.

1945 The Exchange SE #300

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(215) 997-4519

[dekra-certification.us](http://dekra-certification.us)





# CERTIFICATE ADDENDUM

Certificate Number: 151045.000  
TLID: TL1786  
ADDENDUM Page Seven of Eight

The Quality Management System and implementation of:

**CommScope, Inc.**

With site:

**CommScope Telecommunications (China) Co. Ltd.**

No. 68 Su Hong Xi Lu Suzhou Industrial Park,  
Suzhou Jiangsu 215021  
Peoples Republic of China

meets the requirements of the standard:

## TL 9000 – H R6.3/R5.7 (Based on and including ISO 9001:2015)

The validity of this certificate depends on the validity of the main certificate.

### Scope:

制造金属连接器、光纤跳线和连接器、无源光传输子系统、外壳、电缆组件、光纤连接外壳和通信机柜 3.1.1.1.1, 3.1.1.1.2, 3.1.1.3.4, 8.3

Product Categories	
3.1.1.1.1	Metallic Conductor Cable
3.1.1.1.2	Metallic Connectors
3.1.1.3.4	Fixed Antenna Systems
8.3	Cable Assemblies

**Certification Structure:** Multi-site

Certificate Expires: January 04, 2026  
Certificate Issued: January 05, 2023  
Certified Since: August 08, 1994



Dr. Cem O. Onus  
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# 证书附录

证书编号: 151045.000

TLID: TL1786

附录第 8 页, 共 8 页质量管理体系和实施:

**CommScope, Inc.**

其场所:

**康普电信 (中国) 有限公司**

苏州工业园区苏虹西路 68 号,

江苏苏州 215021

中华人民共和国

符合以下标准要求:

## TL 9000 – H R6.3/R5.7 (基于并包括 ISO 9001:2015)

本证书的有效性取决于主证书的有效性。

### 范围:

金属连接器 · 光纤跳线及连接器 · 无源光传输子系统 · 附件 · 电缆组件 · 光缆接头盒 · 通讯机柜的生产

产品类别	
3.1.1.1.1	金属导体电缆
3.1.1.1.2	金属连接器
3.1.1.3.4	固定天线系统
8.3	电缆组件

### 认证结构: 多站点

证书有效期: 2026.1.4

发证日期: 2023.1.5

首次发证日期: 2021.1.5



Dr. Cem O. Onus  
Managing Director

DEKRA Certification, Inc.

1945 The Exchange SE #300

Atlanta, GA 30339 USA

(215) 997-4519

[dekra-certification.us](https://www.dekra-certification.us)





# Certificate of Registration

## ENVIRONMENTAL MANAGEMENT SYSTEM - ISO 14001:2015

This is to certify that:

CommScope, Inc. of North Carolina  
1100 CommScope Place SE  
Hickory  
North Carolina  
28603-0339  
USA


Holds Certificate No:

**EMS 648387**

and operates an Environmental Management System which complies with the requirements of ISO 14001:2015 for the following scope:

The environmental management system to control the risks associated with the manufacture, distribution, field support and central function of telecommunication products and services.

For and on behalf of BSI:

  
Carlos Pitanga, Chief Operating Officer Assurance – Americas

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 1 of 5



...making excellence a habit.™

Certificate No: **EMS 648387**

Location	Registered Activities
Andrew Telecommunications de Reynosa S. de R.L. de C.V. Av. Industrial Reynosa Lte 2 al 5 Parque Industrial Center Reynosa Tamaulipas 88780 Mexico	Manufacture and distribution of telecommunication products including antenna and cable.
CommScope Asia (Suzhou) Technologies Co., Ltd. EPZ II, 77 Qiming Road Suzhou Industrial Park Suzhou Jiangsu 215121 China	Manufacture and distribution of telecommunication products, including cable.
Andrew Telecommunications India Pvt. Ltd. Plot No. N-2, Phase IV Verna Industrial Estate Verna Salcette Goa 403 722 India	Manufacture and distribution of telecommunication products, including antenna and cable.
CommScope EMEA Ltd. Corke Abbey Avenue Bray County Dublin A98FY03 Ireland	Manufacture and distribution of telecommunication products, including cable and connectors.
CommScope Telecommunications (China) Co., Ltd. 68 West Su Hong Xi Lu Suzhou Industrial Park Suzhou Jiangsu 215021 China	Manufacture and distribution of telecommunication products, including antenna and cables.

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 2 of 5

This certificate remains the property of BSI and shall be returned immediately upon request.

An electronic certificate can be authenticated [online](http://www.bsigroup.com/ClientDirectory). Printed copies can be validated at [www.bsigroup.com/ClientDirectory](http://www.bsigroup.com/ClientDirectory). To be read in conjunction with the scope above or the attached appendix.

Information and Contact: BSI, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP. Tel: + 44 345 080 9000  
BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.  
A Member of the BSI Group of Companies.

Certificate No: **EMS 648387**

Location	Registered Activities
Andrew Wireless Systems GmbH Industriering 10 Buchdorf 86675 Germany	Manufacture and distribution of telecommunication products, including amplifiers and antenna systems.
CommScope, Inc. of North Carolina 1100 CommScope Place SE Hickory North Carolina 28603-0339 USA	Corporate headquarters responsible for management system oversight of all locations listed on this certificate.
CommScope Inc. 6519 CommScope Road Catawba North Carolina 28609-0199 USA	Manufacture and distribution of telecommunication products, including cable.
CommScope Inc. 3642 US Hwy 70 East Claremont North Carolina 28610-0879 USA	Manufacture and distribution of telecommunication products, including cable.
CommScope Czech Republic s.r.o. Turanka 98B Brno 62700 Czech Republic	Manufacture and distribution of telecommunication products, including connectors and terminations.
CommScope Inc. of North Carolina 1100 CommScope Place SE Hickory North Carolina 28603-0339 USA	Customer care, facility maintenance, and administrative functions.
ADC de Delicias, S. de R.L. de C.V. Blvd. Fernando Baeza No. 1301 Sur Delicias Chihuahua 33000 Mexico	Manufacturing and distribution of telecommunication products.

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 3 of 5

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To be read in conjunction with the scope above or the attached appendix.

Information and Contact: BSI, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP. Tel: + 44 345 080 9000

BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.

A Member of the BSI Group of Companies.



Certificate No: **EMS 648387**

Location	Registered Activities
ADC de Juarez S. de R.L. de C.V. Parque Industrial Antonio J Bermudez Ciudad Juarez Chihuahua 32470 Mexico	Manufacturing and distribution of telecommunication products.
CommScope Connectivity Belgium bvba Diestsesteenweg 692 Kessel-lo 3010 Belgium	Manufacture and distribution of telecommunication products.
CommScope Technologies de Juarez S. de R.L. de C.V. Santiago Troncoso 331 Praderas del Sur, Ciudad Juarez Chihuahua 32575 Mexico	Manufacture of Fiber Optic Splice Closures (FOSC), Fiber Guide Systems (FGS), Hardened Connectivity and Molding-Gel Filling, including: plastic injection molding, plastic extrusion, plastic and metal machining, and assembly operations.
CommScope Connectivity UK Limited Unit 1 Kinmel Park Bodelwyddan Rhyl, Denbighshire LL18 5TZ United Kingdom	Fibre optic cable manufacturing, termination and design of other telecommunication products and services.
CommScope 11312 S. Pipeline Road Eules Texas 76040 USA	Manufacture, distribution, field support and central function of telecommunication products.
ARRIS GROUP DE MEXICO SA DE CV Av. De la Paz, #11721 Parque Industrial Pacifico Tijuana Baja California 22643 Mexico	Manufacture, repair, support, repair service, distribution of products and components for telecommunications that provide integrated solutions for voice, video and data through the processes of SMT, manual and mechanical assembly, soldering (manual, selective, printed, wave) electrical testing and packaging.

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 4 of 5

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Certificate No: **EMS 648387**

Location	Registered Activities
CommScope Design & Integration UK Ltd Unit 5 & 6, Eden Business Park Edenhouse Drive Old Malton Malton YO17 6AE United Kingdom	Manufacture and distribution of telecommunications products including cabinets.
Arris Indústria Eletrônica do Brasil Ltda. CNPJ: 09.154.836/0001-15 Avenida Torquato Tapajós, 9475 Tarumã Manaus Amazonas 69041-025 Brasil	Manufacturer and distribution of Receivers, Television signal Decoders and Modulator/Router.
CommScope Design and Integration UK Ltd. Lovell House, 412 The Quadrant Birchwood Park Warrington WA3 6FW United Kingdom	Telecommunications project management, site surveys, installations commissioning and rigging.

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

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A Member of the BSI Group of Companies.

# Certificate of Registration

OCCUPATIONAL HEALTH & SAFETY MANAGEMENT SYSTEM - ISO 45001:2018

This is to certify that:

CommScope, Inc. of North Carolina  
1100 CommScope Place SE  
Hickory  
North Carolina  
28603-0339  
USA


Holds Certificate No:

**OHS 650243**

and operates an Occupational Health and Safety Management System which complies with the requirements of ISO 45001:2018 for the following scope:

The occupational health & safety management system to control the hazards associated with the manufacture, distribution, field support and central function of telecommunication products and services.

For and on behalf of BSI:

  
Carlos Pitanga, Chief Operating Officer Assurance – Americas

Original Registration Date: 2016-04-04

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 1 of 5



...making excellence a habit.™



Certificate No: **OHS 650243**

Location	Registered Activities
Andrew Telecommunications de Reynosa S. de R.L. de C.V. Av. Industrial Reynosa Lte 2 al 5 Parque Industrial Center Reynosa Tamaulipas 88780 Mexico	Manufacture and distribution of telecommunication products, including antenna and cable.
CommScope Asia (Suzhou) Technologies Co., Ltd. EPZ II, 77 Qiming Road Suzhou Industrial Park Suzhou Jiangsu 215121 China	Manufacture and distribution of telecommunication products, including cable.
Andrew Telecommunications India Pvt. Ltd. Plot No. N-2, Phase IV Verna Industrial Estate Verna Salcette Goa 403 722 India	Manufacture and distribution of telecommunication products, including antenna and cable.
CommScope EMEA Ltd. Corke Abbey Avenue Bray County Dublin A98FY03 Ireland	Manufacture and distribution of telecommunication products, including cable and connectors.
CommScope Telecommunications (China) Co., Ltd. 68 West Su Hong Xi Lu Suzhou Industrial Park Suzhou Jiangsu 215021 China	Manufacture and distribution of telecommunication products, including antenna and cables.

Original Registration Date: 2016-04-04

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 2 of 5

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BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.  
A Member of the BSI Group of Companies.

Certificate No: **OHS 650243**

Location	Registered Activities
Andrew Wireless Systems GmbH Industriering 10 Buchdorf 86675 Germany	Manufacture and distribution of telecommunication products, including amplifiers and antenna systems.
CommScope, Inc. of North Carolina 1100 CommScope Place SE Hickory North Carolina 28603-0339 USA	Corporate headquarters responsible for management system oversight of all locations listed on this certificate.
CommScope Inc. 6519 CommScope Road Catawba North Carolina 28609-0199 USA	Manufacture and distribution of telecommunication products, including cable.
CommScope Inc. 3642 US Hwy 70 East Claremont North Carolina 28610-0879 USA	Manufacture and distribution of telecommunication products, including cable.
CommScope Czech Republic s.r.o. Turanka 98B Brno 62700 Czech Republic	Manufacture and distribution of telecommunication products, including connectors and terminations.
CommScope Inc. of North Carolina 1100 CommScope Place SE Hickory North Carolina 28603-0339 USA	Customer care, facility maintenance, and administrative functions.
ADC de Delicias, S. de R.L. de C.V. Blvd. Fernando Baeza No. 1301 Sur Delicias Chihuahua 33000 Mexico	Manufacturing and distribution of telecommunication products.

Original Registration Date: 2016-04-04

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

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Certificate No: **OHS 650243**

Location	Registered Activities
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CommScope Connectivity Belgium bvba Diestsesteenweg 692 Kessel-lo 3010 Belgium	Manufacture and distribution of telecommunication products.
CommScope Technologies de Juarez S. de R.L. de C.V. Santiago Troncoso 331 Praderas del Sur, Ciudad Juarez Chihuahua 32575 Mexico	Manufacture of Fiber Optic Splice Closures (FOSC), Fiber Guide Systems (FGS), Hardened Connectivity and Molding-Gel Filling, including: plastic injection molding, plastic extrusion, plastic and metal machining, and assembly operations.
CommScope Connectivity UK Limited Unit 1 Kinmel Park Bodelwyddan Rhyl, Denbighshire LL18 5TZ United Kingdom	Fibre optic cable manufacturing, termination and design of other telecommunication products and services.
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Original Registration Date: 2016-04-04

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Certificate No: **OHS 650243**

Location	Registered Activities
CommScope Design & Integration UK Ltd Unit 5 & 6, Eden Business Park Edenhouse Drive Old Malton Malton YO17 6AE United Kingdom	Manufacture and distribution of telecommunications products including cabinets.
Arris Indústria Eletrônica do Brasil Ltda. CNPJ: 09.154.836/0001-15 Avenida Torquato Tapajós, 9475 Tarumã Manaus Amazonas 69041-025 Brasil	Manufacturer and distribution of Receivers, Television signal Decoders and Modulator/Router.
CommScope Design and Integration UK Ltd. Lovell House, 412 The Quadrant Birchwood Park Warrington WA3 6FW United Kingdom	Telecommunications project management, site surveys, installations commissioning and rigging.

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# CERTIFICATE

Certificate Number: 111045.000  
Including Five Page Addendum

The Quality System of:

**CommScope, Inc.**

With Virtual Central Function at:

1100 CommScope Place SE

Hickory, NC 28602

United States

## ISO 9001:2015

### Scope:

The sales, marketing, design, manufacture, test, repair, support, service, and distribution of telecommunications products, components, and services for the telecommunications, wireless, and broadcast networks industries

Certificate Expires: January 09, 2023  
Certificate Reissued: September 03, 2021  
Certificate Issued: January 10, 2020  
Certified Since: January 10, 2001

Business Segments	Exceptions
Home Networks	None
Broadband Networks	None
Venue and Campus Networks	ICX Products
Outdoor Wireless Networks	None



Dr. Cem O. Onus  
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DEKRA Certification, Inc.  
1120 Welsh Road, Suite 210  
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(215) 997-4519  
<http://www.dekra.us/en/audit>





# CERTIFICATE ADDENDUM

Certificate Number: 111045.000  
ADDENDUM Page One of Five

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**ISO 9001:2015**

<b>Site Activities Legend:</b>	HQ = Headquarters	MFG = Manufacturing	SER = Services (Professional Services and/or Technical Support)
	HW DE= Hardware Development	REP = Repair	SC = Purchasing, Supplier Management, Manufacturing Support, Repair Support
	SW DE= Software Development	SAL = Sales, Marketing	DIST = Distribution

Site Address	Site Activities
CommScope Inc 1100 CommScope Place SE Hickory, NC 28602 United States	HQ (Virtual)
ARRIS Technology, Inc. 3871 Lakefield Drive Suwanee, GA 30024 United States	HW & SW DE, SAL, SER, SC
ARRIS Technology, Inc. 101 Tournament Dr. Horsham, PA, 19044 United States	HW & SW DE, SAL, SER, SC
ARRIS Technology, Inc. 6450 Sequence Drive San Diego, CA 92121 United States	HW & SW DE, SAL, SER, SC
ARRIS Technology, Inc. 900 Chelmsford St. Lowell, MA 01851 United States	HW & SW DE, SAL, SER, SC

Certificate Expires: January 09, 2023  
Certificate Reissued: September 03, 2021  
Certified Since: January 10, 2001



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# CERTIFICATE ADDENDUM

Certificate Number: 111045.000  
ADDENDUM Page Two of Five

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**ISO 9001:2015**

Site Address	Site Activities
ARRIS Solutions, Inc. 2400 Ogden Ave., Suite 180 Lisle, IL 60532 United States	HW & SW DE, SAL, SER, SC
ARRIS 15 Sterling Drive Wallingford, CT 06492 United States	HW & SW DE, SER, SC
ARRIS Technology, Inc. 2450/2500 Walsh Avenue Santa Clara, CA 95051 United States	HW & SW DE, SAL, SER
Ruckus Wireless International Inc. 350 West Java Dr. Sunnyvale, CA 94089 United States	HW & SW DE, SAL, SER, SC
CommScope Technologies LLC 2601 Telecom Parkway Richardson, TX 75082 United States	HW DE, SER
CommScope, Inc of North Carolina 6519 CommScope Road Catawba NC 28009 United States	HW DE, MFG, SAL
ARRIS Technology (Shenzhen) Co., Ltd. South & East Wing, 4F, Block 2 Vision (Shenzhen) Business Park Shenzhen P. R. China	SW DE
Ruckus Wireless Network Technology (Shenzhen) Co. Ltd. Units C&D, 5th Floor, No. 2 Finance base, 8 KeFa Road, Shenzhen, China	SW DE

Certificate Expires: January 09, 2023  
Certificate Reissued: September 03, 2021  
Certified Since: January 10, 2001



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# CERTIFICATE ADDENDUM

Certificate Number: 111045.000  
ADDENDUM Page Three of Five

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**ISO 9001:2015**

Site Address	Site Activities
Ruckus Wireless International Inc., Taiwan Branch @ Neihs District, Taipei City, Rui Road 411, 10th floor, Taipei	SW DE
ARRIS Group India Pvt Limited (AGIPL) Salarpuria Supreme, Ground Floor West Wing & First Floor Munnekolalu Village, Varthur Hobli, Outer Ring Road, Bangalore-560037	SW DE
ARRIS Group Australia Pty Ltd. Level 4, 460 Bourke Street Melbourne, Australia 3000	SAL, SER
ARRIS Group de Mexico S.A. de C.V. Av. La Paz 11721 Parque Industrial Pacifico Tijuana, BC 22643 Mexico	MFG, REP, SC
ARRIS Communications Ireland Limited Building 4300, Cork Airport Business Park Kinsale Road Cork County Ireland	HW & SW DE
ARRIS Group India Private Limited "The Senate" No:33/1, Ulsoor Road, Bangalore - 560 042 India	HW & SW DE
ARRIS Technology (Hangzhou) Company Limited Shanghai Branch 5th Floor, Building 11, No. 1257 MingYue Road, Pudong New District, Shanghai 201206, China	SW DE, SC

Certificate Expires: January 09, 2023  
Certificate Reissued: September 03, 2021  
Certified Since: January 10, 2001



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# CERTIFICATE ADDENDUM

Certificate Number: 111045.000  
ADDENDUM Page Four of Five

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**ISO 9001:2015**

Site Address	Site Activities
ARRIS International Ltd Slats Mill Victoria Road, Saltaire Shipley West Yorkshire BD 18 3LF United Kingdom	HW & SW DE, SAL, SER, SC
ARRIS Group, Inc. 50 Stranmillis Embankment Belfast, BT95FL Northern Ireland	SAL, SWDE, SER
CommScope Czech Republic, s.r.o. Turanka 856/98B 627 00 Brno Czech Republic	HW DE, MFG
CommScope CZ, spol. s.r.o. U Morusi 888, 53006 Pardubice Czech Republic Czech Republic	HW DE
CommScope Connectivity UK Limited Units 1 and 4 Kimmel Park Industrial Estate Bodelwyddan, Denbighshire, LL18 5TZ United Kingdom	HW DE, MFG, SAL
CommScope Design & Integration UK Ltd. Unit 5 Eden Business Park Eden House Drive Old Malton, Malton, North Yorkshire YO17 6AE United Kingdom	HW DE
CommScope Design & Integration UK Limited 412 The Quadrant, Birchwood Park Warrington, WA3 6FW United Kingdom	SAL

Certificate Expires: January 09, 2023  
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# CERTIFICATE ADDENDUM

Certificate Number: 111045.000  
ADDENDUM Page Five of Five

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**ISO 9001:2015**

Site Address	Site Activities
CommScope EMEA Ltd. Corke Abbey Avenue Bray, Co. Dublin Ireland	HW DE, MFG, SAL
CommScope EMEA Ltd. Diestsesteenweg 692 3010 Kessel-Lo, Belgium	HW DE, MFG, SAL
CommScope Italy Srl Via Archimede, 22/24 Agrate Brianza (MB) 20864 Italy	HW DE
Telecom Networks Americas AV. HIPOLITO YRIGROYEN 2999, DEPOSITO 6 EL TALAR, TIGRE Buenos Aires B1618AXD Argentine Republic	SAL, DIST
CommScope Networks India Private Limited Salarpuria Softzone, A Block, 1st Floor Survey No 80/1, 81/1, 81/2, B Wing, Belandur Village, Varthur Hobli, Outer Ring Bangalore – Karnataka 560103 India	SW DE
ADC India Communications Ltd. No 10 C , 2nd Phase Peenya Industrial Area Bangalore – Karnataka 560058 India	MFG, SAL

Certificate Expires: January 09, 2023  
Certificate Reissued: September 03, 2021  
Certified Since: January 10, 2001



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# CommScope Network Infrastructure System

25 Year Extended Product and Application Warranty  
("System Warranty")

# Terms and Conditions

**Extended Product Warranty.** CommScope warrants, for a period of twenty-five (25) years from the Certification Date (the “Warranty Period”), that Products in the Registered System shall be free from defects in materials or workmanship subject, to the terms and conditions below and the terms, conditions and limitations of CommScope’s Limited Product Warranty in effect at the date of sale (available at <http://www.commscope.com/Resources/Warranties/>).

**Application Warranty.** During the Warranty Period, the Registered System will meet or exceed the specifications set forth in the System Specification and support Applications as documented therein.

**System Warranty Requirements.** The System Warranty applies only to Products that are: (i) installed by an Authorized Partner, at the location listed on the System Warranty Certificate; (ii) installed in compliance with CommScope’s written design, engineering and installation procedures, and the specifications for the Application and the System Specification; (iii) designed, installed, and maintained in compliance with the applicable industry standards as set forth in the System Specification; (iv) not subject to conditions that exceed the individual Product Specification(s); (v) used at the original site of installation; (vi) tested pursuant to industry standards and applicable CommScope testing requirements and satisfactorily pass such tests; and (vii) not otherwise expressly excluded or invalidated under the System Warranty Terms and Conditions. To qualify for a System Warranty, all documents, including the prescribed System test results, must be submitted to CommScope for review within sixty (60) days of installation, and registration for the System Warranty must be applied for with CommScope within ninety (90) days from the date the installation is complete. CommScope, in its sole judgment, shall determine if the System Warranty Requirements have been met. CommScope’s approval of a System Warranty shall be evidenced by a numbered registration System Warranty Certificate issued by CommScope. In the event a System Warranty Certificate is issued and CommScope subsequently discovers that any of the System Warranty requirements were not met, then the System Warranty shall be void.

**Beneficiary and Warranty Transfer.** CommScope will only honor System Warranty claims made by the person or entity to which the System Warranty Certificate is issued. The System Warranty may, upon prior written approval from CommScope, be transferred to a successor in interest to the site where the Registered System was originally installed.

**Modifications.** Moves, repairs, alterations, additions, or changes to the Registered System (“Change(s)”) are only covered by the System Warranty if: (i) performed by an Authorized Partner; (ii) installed in compliance with CommScope’s written design, engineering and installation procedures, and the specifications for the Application and the System Specification, and (iii) designed, installed, and maintained in compliance with the applicable industry standards as set forth in the System Specification. Day-to-day administration and maintenance of the Registered System by the End-Customer will not void the System Warranty if performed in compliance with applicable CommScope system design and installation guidelines using CommScope approved products. All test results shall be sent for approval to CommScope along with a detailed description of the Change(s) and bill of materials within thirty (30) days of installation. If the Change(s) are approved, CommScope shall update the System Warranty registration to indicate the Change(s). Failure to comply with the foregoing relating to Change(s) shall void the System Warranty.

**Exclusions from Warranty and Limitations on Liability.** The “Exclusions from Warranty” and “Limitations on Liability” in the Limited Product Warranty shall apply to the System Warranty. The occurrence of an Exclusion from Warranty in the Limited Product Warranty shall void the System Warranty. The System Warranty shall also be void if any Product in the Registered System has been (i) removed from the original site of installation, (ii) altered, repaired or disassembled by a non-Authorized Partner, or (iii) exposed to, or has outside materials applied to it, including but not limited to paint, water, chemicals, solutions, cleaning supplies and lubricants (“Contamination”). End-Customer must notify an Authorized Partner or CommScope within 24 hours of any Contamination.



Outside Plant Cable is excluded from and will void the System Warranty when installed above ground and exposed to the outside environment, including but not limited to, an aerial installation. Outside Plant Cable installed underground, either by direct burial or in conduit, is not excluded from the System Warranty.

Failure of the End-Customer to submit any System Warranty claim to the authorized CommScope office as designated by CommScope within thirty (30) days following expiration of the System Warranty shall be an admission by the End-Customer and conclusive proof that the Registered System and Product(s) are in every respect as warranted and shall release CommScope and the Authorized Partner from any and all claims for damage or loss sustained by the End-Customer.

Any violation or non-compliance with the System Warranty Terms and Conditions will void the System Warranty.

**Remedies.** If during the Warranty Period, the End-Customer experiences problems with a Registered System or a Product in a Registered System ("Problem") and suspects there is a potential warranty claim hereunder, the End-Customer must first reasonably investigate potential causes of the suspected Problem that are not CommScope related and reasonably determine that none of these potential causes were responsible for the Problem. Once the End-Customer reasonably believes that all non-CommScope causes for the Problem are ruled out, but in no event more than thirty (30) days after the End-Customer knew or should have known of the Problem, the End-Customer must contact the Authorized Partner that installed the Registered System to report the Problem. If the Authorized Partner is unable to resolve the Problem, then the Authorized Partner will contact CommScope and make a claim under the System Warranty for further investigation and resolution.

If CommScope determines that a Problem is due to a breach of the System Warranty, CommScope will repair or replace Product as CommScope deems necessary to correct the Problem, including the provision of reasonable labor and removal and reinstallation of such Product at CommScope's discretion. CommScope shall only be responsible for costs that have received the prior written authorization of CommScope. If CommScope chooses to repair Product, CommScope may use new or reconditioned replacement parts. If CommScope chooses to replace Product, CommScope may replace with new or reconditioned products of the same or similar design. Any repair or replacement will be warranted for either (a) 90 days or (b) the remainder of the original Warranty Period, whichever is longer. If the Problem is found by CommScope or an Authorized Partner not to be related to a Product or any warranty exclusions, then End-Customer will be responsible for any costs incurred related to the Problem claim.

**Choice of Law.** The System Warranty shall be governed by and construed in accordance with the laws of the State of North Carolina, U.S.A. The United Nations Convention on Contracts for the International Sale of Goods shall not apply. The End-Customer acknowledges that as a condition to receiving the System Warranty, End-Customer unconditionally submits to the jurisdiction of the North Carolina state and federal courts. If any portion of the System Warranty is not enforceable due to local legal requirements, then such specific language shall be modified to meet local legal requirements consistent with CommScope's intent.

# Definitions

The following definitions shall apply to the System Warranty:

**CommScope** shall mean CommScope Technologies LLC.

**Application** shall mean a standardized set of network technologies, protocols, and hardware for enabling communication over the prescribed System as documented by CommScope.

**Authorized Partner** shall mean a party that is certified by CommScope as a CommScope installation partner and that is in good standing with CommScope at the time of installation.

**Authorized Reseller** shall mean a party that is authorized in writing by CommScope to sell Products and that is in good standing with CommScope at the time of sale.

**Certification Date** shall mean the earlier of the registration date on the face of the System Warranty Certificate or the Original Installation Completion Date.

**End-Customer** shall mean the end-user who has the Products installed at its premises by an Authorized Partner.

**Original Installation Completion Date** shall mean the date that the Authorized Partner completed the installation and testing of the Registered System at the End-Customer's site being submitted for System Warranty eligibility.

**Outside Plant Cable** shall mean all cabling located between demarcation points in buildings, switching and data centers and the demarcation point in another such facility.

**Passive** shall mean signal-carrying components that exhibit no gain or contribute no energy.

**Product(s)** shall mean Passive products manufactured by CommScope that are contained in the bill of materials, for an end-to-end SYSTIMAX®, UNIPRISE®, or NETCONNECT® system, which were filed with the registration for the System Warranty and which were purchased from an Authorized Reseller.

**Product Specification** shall mean CommScope's published specification(s), in effect at the time of sale, which defines the optical and/or electrical capabilities of the individual Products.

**Registered System** shall mean the System designated on the System Warranty Certificate.

**System** refers to the end-to-end SYSTIMAX®, UNIPRISE®, or NETCONNECT® system, comprised entirely of Products approved by CommScope for the respective System and that meet all of the conditions in the "System Warranty Requirements" Section of these System Warranty Terms and Conditions.

**System Specification** shall mean CommScope's published specification(s) in effect at the time of sale, which describes the optical and/or electrical capabilities of the System as a whole.

**System Warranty** shall mean the Extended Product and Application Warranty.

**System Warranty Certificate** shall mean the certificate issued by CommScope evidencing CommScope's approval and issuance of a System Warranty and identifying the covered System.

**Precedence.** In the event of any conflict between the terms of the System Warranty and CommScope's Limited Product Warranty and/or a System Specification, the terms of the System Warranty shall control.



commscope.com

Visit our website or contact your local CommScope representative for more information.

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Unless otherwise noted, all trademarks identified by ® or ™ are registered trademarks, respectively, of CommScope, Inc. This document is for planning purposes only and is not intended to modify or supplement any specifications or warranties relating to CommScope products or services. CommScope is committed to the highest standards of business integrity and environmental sustainability with a number of CommScope's facilities across the globe certified in accordance with international standards, including ISO 9001, TL 9000, and ISO 14001. Further information regarding CommScope's commitment can be found at [www.commscope.com/About-Us/Corporate-Responsibility-and-Sustainability](http://www.commscope.com/About-Us/Corporate-Responsibility-and-Sustainability).

BR-1110431-EN (06/18)

1. **Definitions.** For purposes of this Warranty, (i) “Buyer” shall mean the individual or entity identified on the applicable purchase order or supply agreement (or, if different, on Seller’s quotation, order acknowledgement or confirmation), (ii) “Seller” shall mean the CommScope entity identified on such entity’s quotation, order acknowledgement, confirmation or supply agreement, (iii) “Product” shall mean a product manufactured by Seller pursuant to the applicable supply agreement, quotation, order acknowledgement or confirmation, and (iv) “Warranty Period” shall mean one year from date of original shipment from Seller’s facility unless a different time period is set forth in **Exhibit A**.
2. **Limited Warranty.** Seller warrants that, as of the date of delivery, Seller has good title to the Product, free from any lawful security interest or other lien or encumbrance unknown to Buyer. In addition, during the Warranty Period, the Product will be free from defects in materials or workmanship arising under proper and normal use. This Warranty shall apply only to the Products and shall not apply to any other goods or materials, parts or components of a system or any system as a whole. This Warranty does not cover ordinary wear and tear. Seller does not warrant any products manufactured by third parties; provided that Seller will, to the extent permitted by the manufacturer, assign third-party warranties to Buyer.
3. **Inspection.** If Buyer claims that a Product is defective in materials or workmanship, Seller shall have the right to either examine the Product where it is located or, in its sole discretion, issue shipping instructions for return of the Product. Seller’s inspection in response to a warranty claim shall not constitute acceptance or acknowledgment of the claim’s validity. Buyer shall prepay all transportation charges for such return.
4. **Remedies.** Seller’s sole and exclusive obligation and Buyer’s exclusive remedy under this Warranty is Seller’s repair or replacement of the defective Product or a credit for the purchase price of the defective Product. Seller shall have sole discretion as to which of these remedies Seller will provide. Seller is not liable for any repair or maintenance costs incurred by Buyer, unless Seller authorizes such charges in writing in advance of the commencement of the work. If Seller elects to replace or repair the defective Product, the replaced or repaired Product will be warranted for the remainder of the Warranty Period applicable to the originally shipped Product, but the Warranty shall not be extended beyond the original Warranty Period.
5. **Notice and Waiver.** If Buyer discovers any defect in the Product, Buyer must provide prompt (and in no case later than thirty (30) days after discovery) written notice to Seller of the claimed defect. Such notice shall describe, in reasonable detail, the symptoms of such defect. The notice must be received by Seller during the Warranty Period for such Product. Failure to give timely notice of a claim shall result in Buyer’s waiver of such claim.
6. **Transfer of Ownership.** This Warranty is not transferable unless Buyer is expressly authorized by Seller in writing to resell the Product. In addition, Buyer must notify Seller on or before the fifteenth (15<sup>th</sup>) day after the date on which it transfers ownership of the warranted Product. Any transfers in violation of this Section shall invalidate this Warranty. Notice of the transfer of ownership must be in writing and shall include the name and address of the new owner.
7. **Exclusions from Warranty.** This Warranty shall not apply to problems attributable to, or as a result of:
  - (a) improper installation or misapplication of parts;
  - (b) chain or system failures induced by other products or components;
  - (c) lack of proper inspection or maintenance or failure to provide a suitable operating environment;
  - (d) any consumables provided with the Product and any other materials, components or products manufactured by a third party;
  - (e) power surges, fire, unusual mechanical, physical or electrical stress, severe weather conditions or acts of nature, including but not limited to, lightning or floods;
  - (f) usage or operation not in accordance with published ratings, specifications or instructions, including but not limited to environmental specifications identified by Seller;
  - (g) any adjustment, modification, alteration, removal or repair of any part of the Product not expressly authorized by Seller in writing;
  - (h) accidental damage, misuse, abuse, neglect or unauthorized access of the Product or of any system of which the warranted Product is a part;
  - (i) any type of aesthetic changes due to oxidation or corrosion occurring on stainless steel or galvanized steel parts installed in unusually corrosive marine and industrial atmospheres (in which case Seller’s only obligation shall be to ensure that Product complies with Seller’s published material specifications);
  - (j) use of the Product for purposes other than that for which it was designed; or
  - (k) mishandling during shipment of the Product.

This Warranty is for Products installed and used in accordance with Seller’s design, installation and operating parameters. Buyer’s failure to ensure conformity with such parameters will void all warranties. Under no circumstance shall Seller have any liability or obligation with respect to expenses, liabilities or losses associated with the installation or removal of any Product or the installation or removal of any components for inspection, testing or redesign occasioned by any defect or by any repair or replacement of a Product.

8. **Limitation on Liability.** THE WARRANTIES SET FORTH IN SECTION 2 HEREOF ARE EXCLUSIVE AND ARE MADE ONLY TO BUYER. SELLER MAKES NO OTHER REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, AND SPECIFICALLY DISCLAIMS AND EXCLUDES ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY, NONINFRINGEMENT OR FITNESS FOR A PARTICULAR PURPOSE AND ANY REPRESENTATION OR WARRANTY ARISING BY USAGE OF TRADE, COURSE OF DEALING OR COURSE OR PERFORMANCE. No person is authorized to give any additional warranties on Seller’s behalf or to assume for Seller any other liability, except in a writing signed by an authorized officer of Seller. SELLER’S TOTAL LIABILITY FOR ANY CLAIM OR DAMAGE ARISING OUT OF OR IN CONNECTION WITH THE MANUFACTURE, SALE, DELIVERY OR USE OF THE PRODUCTS WILL BE LIMITED TO PROVEN DIRECT DAMAGES, NOT TO EXCEED THE PURCHASE PRICE OF SUCH PRODUCTS. IN NO EVENT WILL SELLER BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL OR PUNITIVE DAMAGES, INCLUDING, WITHOUT LIMITATION, ANY CLAIM FOR LOSS OF ACTUAL OR ANTICIPATED REVENUES OR PROFITS. These limitations on liability will apply regardless of the form of action, whether in contract, tort, strict liability or otherwise, and whether damages were foreseeable and will survive failure of any exclusive remedies provided in Section 4 hereof.

9. **Choice of Law.** The terms and conditions contained herein and the rights of the parties to any transaction to which they relate shall be governed by and construed in accordance with the laws of the State of North Carolina, U.S.A. The United Nations Convention on Contracts for the International Sale of Goods shall not apply.



## LIMITED PRODUCT WARRANTY

### Exhibit A

Seller warrants that the Products identified below will be free from defects in material and workmanship arising under proper and normal use for the following Warranty Period:

<b>QR® Coaxial Cable</b>	Ten (10) years from the date of original shipment.
<b>ValuSite® Products</b>	Three (3) years from the date of original shipment.
<b>I-Line Accessory Products</b>	Three (3) years from the date of original shipment.
<b>Standard RADIAX® Cable, Connector, Accessory and Cable Assembly* Products</b>	Five (5) years from the date of original shipment, except for the following: (i) two (2) years for surge arrestors; and (ii) one (1) year for all other accessories.
<b>Standard CNT® Cable, Connector, Accessory and Cable Assembly† Products</b>	Five (5) years from the date of original shipment; except that the Warranty Period for Products purchased for resale purposes shall be one (1) year.
<b>Broadband RF Connectivity Products</b>	Five (5) years from the date of original shipment.
<b>Other OSP Cable Products (P3®, Drop Coax, Fiber Cable, Fiber Drop Cable, CIC)</b>	One (1) year from the date of original shipment
<b>FDH Products</b>	One (1) year from the date of original shipment
<b>Multiservice terminals (MST), Open Terminals (OTE) and Hardened Drop Cable Assemblies</b>	One (1) year from the date of original shipment
<b>OSP “Box” Products</b>	One (1) year from the date of original shipment
<b>Mini-RDTs and RDTs</b>	One (1) year from the date of original shipment
<b>FOSC™, FIST™ and Tenio™</b>	One (1) year from the date of original shipment
<b>OSP Copper Connect and Closure Products</b>	One (1) year from the date of original shipment
<b>Standard HELIAX® Cable, Connector, Accessory and Cable Assembly‡ Products</b>	Ten (10) years from the date of original shipment; except for the following: (i) three (3) years for ValuFlex® cable assemblies; (ii) three (3) years for weatherproofing kits; (iii) one (1) year for cable preparation tools (excluding blades); (iv) one year for single click-on hanger kits; and (v) two (2) years for surge arrestors.
<b>HELIAX® FiberFeed® Products, including FiberFeed® hybrid and fiber cables and assemblies, power cables and junction boxes</b>	One (1) year from the date of original shipment.
<b>Steel Products and Rapid Deployment Monopoles</b>	Three (3) years from the date of original shipment.
<b>Standard ION-B®, ION-E®, ION-M®, ION-U®, MR, p-POI®, i-POI®, e-POI™, and Node Repeater Products</b>	The earlier of: (i) one (1) year from the date of installation; or (ii) fifteen (15) months from the date of shipment.
<b>Premium Passive Products, including In-Building Directional Couplers, Hybrid Matrices, Tappers, Power Splitters, Terminations, Attenuators and CMAX Antenna Products</b>	Five (5) years from the date of original shipment.
<b>ValuDAS® Passive Products, including Air Directional Couplers, Hybrid Couplers, High Power Splitters, and Cell-Max™ Antennas</b>	Two (2) years from the date of original shipment.
<b>InterReach Fusion®</b>	One (1) year from the date of original shipment.
<b>InterReach Unison®</b>	One (1) year from the date of original shipment.
<b>FlexWave® Spectrum</b>	One (1) year from the date of original shipment.
<b>FlexWave® Prism</b>	One (1) year from the date of original shipment.
<b>FlexWave® Active Integration Panel (AIP)</b>	One (1) year from the date of original shipment.
<b>A.I.M.O.S. Software Products</b>	One (1) year from the date of original shipment.

\* RADIAX® Cable Assembly Product means any RADIAX® coaxial cable that has been fitted with Seller’s connectors in accordance with the installation instructions.

† CNT® Cable Assembly Product means any CNT® coaxial cable that has been fitted with Seller’s connectors by Seller or its certified distributor.

‡ HELIAX® Cable Assembly Product means any HELIAX® coaxial cable or elliptical waveguide that has been fitted with Seller’s connectors by Seller or its certified distributor.

## LIMITED PRODUCT WARRANTY

<b>In- Building and Fixed Subscriber Antennas</b>	The earlier of: (i) three (3) years from the date of installation or (ii) thirty-nine (39) months from the date of original shipment.
<b>OneCell® and S1000 Small Cell Platforms (excluding software)</b>	The earlier of: (i) one (1) year from the date of installation; or (ii) fifteen (15) months from the date of original shipment
<b>Small Cell Device Management System (DMS) Software for OneCell® and S1000 Small Cell Platforms</b>	Ninety (90) days from the date of original shipment
<b>Base Station Antenna Products</b>	Two (2) years from the date of original shipment for all base station antennas except base station antennas incorporating N-type connectors, which shall have a warranty of one (1) year from the date of original shipment.
<b>Standard Tower Mounted Amplifier, Bias Tee and Power Distribution Unit Products</b>	Two (2) years from the date of original shipment.
<b>Standard Filter, Diplexer and Triplexer Products</b>	Two (2) years from the date of original shipment.
<b>DryLine® Dehydrator Systems and Line Monitoring Systems</b>	Three (3) years from the date of original shipment or 3,000 hours of actual run time, whichever occurs first; except the Warranty Period for the compressor is only one (1) year from original shipment or 1,000 hours of actual run time, whichever occurs first. This Warranty Period does not apply to Factory Reconditioned Dehydrators, which are warranted for only one (1) year from the date of original shipment.
<b>Microwave Antennas</b>	Three (3) years from the date of original shipment.
<b>Terrestrial Microwave System Products (including Microwave System Flex-Twist, Coupler, Filter and Diplexer Products)</b>	Three (3) years from the date of original shipment.
<b>SiteRise™ Solutions</b>	One (1) year from the date of original shipment on workmanship for the Solution.
<b>Copper Structured Cabling Products</b>	One (1) year from the date of Installation
<b>Fiber Optic Panels, including Accessories, Mounting Hardware, Modules</b>	One (1) year from the date of shipment
<b>Fiber Optic Field Terminated Connectors, Kits, Tools, Consumables, Accessories</b>	One (1) year from the date of shipment
<b>Indoor Fiber Cable Patch Cords, Cable Assemblies, Fiber Trunks</b>	One (1) year from the date of shipment
<b>Passive Optical Components and Value Added Modules (VAMs)</b>	One (1) year from the date of shipment
<b>Fiber Guide Fiber Management System (FGS)</b>	One (1) year from the date of shipment
<b>Optical Distribution Frames, including Modules, Blocks, Accessories and Hardware</b>	One (1) year from the date of shipment
<b>Other Enterprise Products (Coax, Automotive Cables, Enterprise Enclosures and miscellaneous items) (excluding software)</b>	One (1) year from the date of installation.
<b>Cabinets Cable and Apparatus Products</b>	One (1) year from the date of original shipment.
<b>Electronic Enclosure Products (Cabinets)</b>	Two (2) years from the date of original shipment.
<b>Alifabs™ Cabinets &amp; Ancillary Products</b>	One (1) year from the date of original shipment.
<b>Alifabs™ Free Cooling Products and Accessories and Spare Parts, including Monitor</b>	Two (2) years from the date of original shipment.
<b>Alifabs™ Telecommunications Towers and Accessories</b>	One (1) year from the date of original shipment.
<b>Alifabs™ Services (power upgrades, enablements, installation and decommission work, rigging, and fault management)</b>	One (1) year from the date of completion of the work.
<b>Any other Software Products</b>	Ninety (90) days from the date of original shipment.

# CERTIFICATE

Certificate Number: 111045.000  
Including Seven Page Addendum

The Quality Management System and implementation of:

## CommScope, Inc.

With Virtual Central Function at:  
1100 CommScope Place SE  
Hickory, NC 28602  
United States

meets the requirements of the standard:

## ISO 9001:2015

### Scope:

The sales, marketing, design, manufacture, test, repair, support, service, and distribution of telecommunications products, components, and services for the telecommunications, wireless, and broadcast networks industries

Certificate Expires: January 04, 2026  
Certificate Issued: January 05, 2023  
Certified Since: January 10, 2001

Business Segments	Exceptions
Connectivity and Cable Solutions (CCS)	None
Networking, Intelligent Cellular & Security Solutions (NICS)	None
Outdoor Wireless Networks (OWN)	None
Access Network Solutions (ANS)	None



Dr. Cem O. Onus  
Managing Director

DEKRA Certification, Inc.  
1945 The Exchange SE #300  
Atlanta, GA 30339 USA  
(215) 997-4519  
<https://www.dekra.us/en/audits/>





# CERTIFICATE ADDENDUM

Certificate Number: 111045.000  
ADDENDUM Page One of Seven

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**ISO 9001:2015**

<b>Site Activities Legend:</b>	HQ = Headquarters	MFG = Manufacturing	SER = Services (Professional Services and/or Technical Support)
	HW DE= Hardware Development	REP = Repair	SC = Purchasing, Supplier Management, Manufacturing Support, Repair Support
	SW DE= Software Development	SAL = Sales, Marketing	DIST = Distribution

<b>Site Address</b>	<b>Site Activities</b>
CommScope Inc 1100 CommScope Place SE Hickory, NC 28602 United States	HQ (Virtual)
ARRIS Technology, Inc. 3871 Lakefield Drive Suwanee, GA 30024 United States	HW & SW DE, SAL, SER, SC
ARRIS Technology, Inc. 101 Tournament Dr. Horsham, PA, 19044 United States	HW & SW DE, SAL, SER, SC
ARRIS Technology, Inc. 6450 Sequence Drive San Diego, CA 92121 United States	SW DE, SER
ARRIS Technology, Inc. 900 Chelmsford St. Lowell, MA 01851 United States	HW & SW DE, SER, SC

Certificate Expires: January 04, 2026  
Certificate Issued: January 05, 2023  
Certified Since: January 10, 2001



Dr. Cem O. Onus  
Managing Director

DEKRA Certification, Inc.  
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# CERTIFICATE ADDENDUM

Certificate Number: 111045.000  
ADDENDUM Page Two of Seven

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**ISO 9001:2015**

Site Address	Site Activities
ARRIS Solutions, Inc. 2400 Ogden Ave., Suite 180 Lisle, IL 60532 United States	HW & SW DE, SAL, SER, SC
ARRIS 15 Sterling Drive Wallingford, CT 06492 United States	HW & SW DE, SER, SC
ARRIS Technology, Inc. 2450/2500 Walsh Avenue Santa Clara, CA 95051 United States	HW & SW DE, SAL, SER
Ruckus Wireless International Inc. 350 West Java Dr. Sunnyvale, CA 94089 United States	HW & SW DE, SER
Ruckus Wireless Network Technology (Shenzhen) Co. Ltd. Units C&D, 5th Floor, No. 2 Finance base, 8 KeFa Road, Shenzhen, China	SW DE, SC, HW DE

Certificate Expires: January 04, 2026  
Certificate Issued: January 05, 2023  
Certified Since: January 10, 2001



Dr. Cem O. Onus  
Managing Director

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# CERTIFICATE ADDENDUM

Certificate Number: 111045.000  
ADDENDUM Page Three of Seven

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**ISO 9001:2015**

Site Address	Site Activities
Site Address	Site Activities
CommScope Asia (Suzhou) Technologies Co., Ltd. 77 Qiming Road, Suzhou Industrial Park Suzhou, Jiangsu 215121 Peoples Republic of China	MFG, SC
Ruckus Wireless International Inc., Taiwan Branch @ Neihs District, Taipei City, Rui Road 411, 10th floor, Taipei	SW DE
ARRIS Group India Pvt Limited (AGIPL) Salarpuria Supreme, Ground Floor West Wing & First Floor Munnekolalu Village, Varthur Hobli, Outer Ring Road, Bangalore-560037	SW DE
ARRIS Group de Mexico S.A. de C.V. Av. La Paz 11721 Parque Industrial Pacifico Tijuana, BC 22643 Mexico	MFG, REP, SC
ARRIS Communications Ireland Limited Building 4300, Cork Airport Business Park Kinsale Road Cork County Ireland	HW & SW DE
ARRIS Group India Private Limited "The Senate" No:33/1, Ulsoor Road, Bangalore - 560 042 India	HW & SW DE

Certificate Expires: January 04, 2026  
Certificate Issued: January 05, 2023  
Certified Since: January 10, 2001



Dr. Cem O. Onus  
Managing Director

DEKRA Certification, Inc.  
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# CERTIFICATE ADDENDUM

Certificate Number: 111045.000  
ADDENDUM Page Four of Seven

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**ISO 9001:2015**

Site Address	Site Activities
ARRIS Group, Inc. 50 Stranmillis Embankment Belfast, BT95FL Northern Ireland	SW DE
CommScope Czech Republic, s.r.o. Turanka 856/98B 627 00 Brno Czech Republic	HW DE,
CommScope CZ, spol. s.r.o. U Morusi 888, 53006 Pardubice Czech Republic Czech Republic	HW DE,
CommScope Connectivity UK Limited Units 1 and 4 Kinmel Park Industrial Estate Bodelwyddan, Denbighshire, LL18 5TZ United Kingdom	HW DE, MFG, SAL
CommScope Design & Integration UK Ltd. Unit 5 & 6 Eden Business Park Eden House Drive Old Malton, Malton, North Yorkshire YO17 6AE United Kingdom	HW DE, MFG, SC

Certificate Expires: January 04, 2026  
Certificate Issued: January 05, 2023  
Certified Since: January 10, 2001



Dr. Cem O. Onus  
Managing Director

DEKRA Certification, Inc.  
1945 The Exchange SE #300  
Atlanta, GA 30339 USA  
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# CERTIFICATE ADDENDUM

Certificate Number: 111045.000  
ADDENDUM Page Five of Seven

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**ISO 9001:2015**

Site Address	Site Activities
CommScope Design & Integration UK Limited 412 The Quadrant, Birchwood Park Warrington, WA3 6FW United Kingdom	SER
CommScope EMEA Ltd. Corke Abbey Avenue Bray, Co. Dublin Ireland	MFG, SAL
CommScope EMEA Ltd. Diestsesteenweg 692 3010 Kessel-Lo, Belgium	HW DE, MFG, SAL
CommScope Italy Srl Via Archimede, 22/24 Agrate Brianza (MB) 20864 Italy	HW DE, REP, SW DE
Telecom Networks Americas AV. HIPOLITO YRIGROYEN 2999, DEPOSITO 6 EL TALAR, TIGRE Buenos Aires B1618AXD Argentine Republic	SAL, DIST
CommScope Networks India Private Limited Salarpuria Softzone, A Block, 1st Floor Survey No 80/1, 81/1, 81/2, B Wing, Belandur Village, Varthur Hobli, Outer Ring Bangalore – Karnataka 560103 India	SW DE
ADC India Communications Ltd. No 10 C , 2nd Phase Peenya Industrial Area Bangalore – Karnataka 560058 India	MFG, SC

Certificate Expires: January 04, 2026  
Certificate Issued: January 05, 2023  
Certified Since: January 10, 2001



**Dr. Cem O. Onus**  
Managing Director

DEKRA Certification, Inc.  
1945 The Exchange SE #300  
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# CERTIFICATE ADDENDUM

Certificate Number: 111045.000  
ADDENDUM Page Six of Seven

The Quality Management System and implementation of:

**CommScope, Inc.**

With site at:

**CommScope Asia (Suzhou) Technologies Co.,Ltd.**

77 Qiming Road, Suzhou Industrial Park

Suzhou, Jiangsu 215121

Peoples Republic of China

meets the requirements of the standard:

## ISO 9001:2015

The validity of this certificate depends on the validity of the main certificate.

### Scope:

Production of network cable, fiber cable and communication equipment component (copper patch cords, copper panel, accessories etc.)

**Certification Structure:** Multi-site

Certificate Expires:	January 04, 2026
Certificate Issued:	January 05, 2023
Certified Since:	January 10, 2001



Dr. Cem O. Onus  
Managing Director

DEKRA Certification, Inc.  
1945 The Exchange SE #300  
Atlanta, GA 30339 USA  
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# 证书附录

证书编号: 111045.000

附录第7页,共7页

质量管理体系和实施:

**CommScope, Inc.**

其场所:

**康普科技 (苏州) 有限公司**

中国江苏省苏州工业园区启明路77号,邮编215121

符合以下标准要求:

## ISO 9001:2015

本证书的有效性取决于主证书的有效性。

### 范围:

网络线、光缆、通信系统设备材料 (网络跳线、配线装置等) 的生产。

认证结构: 多场所

证书有效期: 2026.01.04

发证日期: 2023.01.05

首次发证日期: 2001.1.10



Dr. Cem O. Onus  
Managing Director

DEKRA Certification, Inc.  
1945 The Exchange SE #300  
Atlanta, GA 30339 USA  
(215) 997-4519  
<https://www.dekra.us/en/audits/>



# Certificate of Registration

## ENVIRONMENTAL MANAGEMENT SYSTEM - ISO 14001:2015

This is to certify that:

CommScope, Inc. of North Carolina  
1100 CommScope Place SE  
Hickory  
North Carolina  
28603-0339  
USA


Holds Certificate No:

**EMS 648387**

and operates an Environmental Management System which complies with the requirements of ISO 14001:2015 for the following scope:

The environmental management system to control the risks associated with the manufacture, distribution, field support and central function of telecommunication products and services.

For and on behalf of BSI:

  
Carlos Pitanga, Chief Operating Officer Assurance – Americas

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 1 of 5



...making excellence a habit.™

Certificate No: **EMS 648387**

Location	Registered Activities
Andrew Telecommunications de Reynosa S. de R.L. de C.V. Av. Industrial Reynosa Lte 2 al 5 Parque Industrial Center Reynosa Tamaulipas 88780 Mexico	Manufacture and distribution of telecommunication products including antenna and cable.
CommScope Asia (Suzhou) Technologies Co., Ltd. EPZ II, 77 Qiming Road Suzhou Industrial Park Suzhou Jiangsu 215121 China	Manufacture and distribution of telecommunication products, including cable.
Andrew Telecommunications India Pvt. Ltd. Plot No. N-2, Phase IV Verna Industrial Estate Verna Salcette Goa 403 722 India	Manufacture and distribution of telecommunication products, including antenna and cable.
CommScope EMEA Ltd. Corke Abbey Avenue Bray County Dublin A98FY03 Ireland	Manufacture and distribution of telecommunication products, including cable and connectors.
CommScope Telecommunications (China) Co., Ltd. 68 West Su Hong Xi Lu Suzhou Industrial Park Suzhou Jiangsu 215021 China	Manufacture and distribution of telecommunication products, including antenna and cables.

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 2 of 5

This certificate remains the property of BSI and shall be returned immediately upon request.

An electronic certificate can be authenticated [online](http://www.bsigroup.com/ClientDirectory). Printed copies can be validated at [www.bsigroup.com/ClientDirectory](http://www.bsigroup.com/ClientDirectory). To be read in conjunction with the scope above or the attached appendix.

Information and Contact: BSI, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP. Tel: + 44 345 080 9000  
BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.  
A Member of the BSI Group of Companies.



Certificate No: **EMS 648387**

Location	Registered Activities
Andrew Wireless Systems GmbH Industriering 10 Buchdorf 86675 Germany	Manufacture and distribution of telecommunication products, including amplifiers and antenna systems.
CommScope, Inc. of North Carolina 1100 CommScope Place SE Hickory North Carolina 28603-0339 USA	Corporate headquarters responsible for management system oversight of all locations listed on this certificate.
CommScope Inc. 6519 CommScope Road Catawba North Carolina 28609-0199 USA	Manufacture and distribution of telecommunication products, including cable.
CommScope Inc. 3642 US Hwy 70 East Claremont North Carolina 28610-0879 USA	Manufacture and distribution of telecommunication products, including cable.
CommScope Czech Republic s.r.o. Turanka 98B Brno 62700 Czech Republic	Manufacture and distribution of telecommunication products, including connectors and terminations.
CommScope Inc. of North Carolina 1100 CommScope Place SE Hickory North Carolina 28603-0339 USA	Customer care, facility maintenance, and administrative functions.
ADC de Delicias, S. de R.L. de C.V. Blvd. Fernando Baeza No. 1301 Sur Delicias Chihuahua 33000 Mexico	Manufacturing and distribution of telecommunication products.

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 3 of 5

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To be read in conjunction with the scope above or the attached appendix.

Information and Contact: BSI, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP. Tel: + 44 345 080 9000

BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.

A Member of the BSI Group of Companies.

Certificate No: **EMS 648387**

Location	Registered Activities
ADC de Juarez S. de R.L. de C.V. Parque Industrial Antonio J Bermudez Ciudad Juarez Chihuahua 32470 Mexico	Manufacturing and distribution of telecommunication products.
CommScope Connectivity Belgium bvba Diestsesteenweg 692 Kessel-lo 3010 Belgium	Manufacture and distribution of telecommunication products.
CommScope Technologies de Juarez S. de R.L. de C.V. Santiago Troncoso 331 Praderas del Sur, Ciudad Juarez Chihuahua 32575 Mexico	Manufacture of Fiber Optic Splice Closures (FOSC), Fiber Guide Systems (FGS), Hardened Connectivity and Molding-Gel Filling, including: plastic injection molding, plastic extrusion, plastic and metal machining, and assembly operations.
CommScope Connectivity UK Limited Unit 1 Kinmel Park Bodelwyddan Rhyl, Denbighshire LL18 5TZ United Kingdom	Fibre optic cable manufacturing, termination and design of other telecommunication products and services.
CommScope 11312 S. Pipeline Road Eules Texas 76040 USA	Manufacture, distribution, field support and central function of telecommunication products.
ARRIS GROUP DE MEXICO SA DE CV Av. De la Paz, #11721 Parque Industrial Pacifico Tijuana Baja California 22643 Mexico	Manufacture, repair, support, repair service, distribution of products and components for telecommunications that provide integrated solutions for voice, video and data through the processes of SMT, manual and mechanical assembly, soldering (manual, selective, printed, wave) electrical testing and packaging.

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 4 of 5

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A Member of the BSI Group of Companies.

Certificate No: **EMS 648387**

Location	Registered Activities
CommScope Design & Integration UK Ltd Unit 5 & 6, Eden Business Park Edenhouse Drive Old Malton Malton YO17 6AE United Kingdom	Manufacture and distribution of telecommunications products including cabinets.
Arris Indústria Eletrônica do Brasil Ltda. CNPJ: 09.154.836/0001-15 Avenida Torquato Tapajós, 9475 Tarumã Manaus Amazonas 69041-025 Brasil	Manufacturer and distribution of Receivers, Television signal Decoders and Modulator/Router.
CommScope Design and Integration UK Ltd. Lovell House, 412 The Quadrant Birchwood Park Warrington WA3 6FW United Kingdom	Telecommunications project management, site surveys, installations commissioning and rigging.

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 5 of 5

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BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.  
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# DECLARATION OF PERFORMANCE

**No. Z-DSSU/D**  
(Fibre count range 2 - 24, all fibre types)

1. Unique identification code of the product type: **Z-□□□-DS-□□-□SUBK/D**
2. Type, batch or serial number: **Found on packaging label**
3. Intended use(s): *Supply of communications in buildings and other civil engineering works, communication cable with the objective of limiting the generation and spread of fire and smoke.*
4. Manufacturer Name: *CommScope EMEA, Ltd.  
Corke Abbey Avenue  
Bray, Wicklow, Ireland A98 FY03  
Tel: +351 1 204 2000  
Fax: +351 1 204 2003*
5. Authorized representative: *Not Applicable*
6. System/s of AVCP: **System 3**
7. Harmonized standards: **BS EN50575:2014+A1:2016  
EN50575:2014+A1:2016**

Approved Body (UKCA): *N° 2661 – British Approvals Service for Cables (BASEC)*  
Notified Body (CE): *N° 1812 – EFECTIS France*

*Approved Body No. 2661 and Notified Body No. 1812 performed the determination of the product type before placing the product on the market and issued the certificate of constancy of performance.*

8. Declared performance(s):

Essential Characteristics	Performance	Harmonized Technical Specification
Reaction to Fire	<b>D<sub>ca</sub>-s1a,d1,a2</b>	BS EN 50575:2014+A1:2016 EN50575:2014+A1:2016
Dangerous Substances	<b>None</b>	

The performance of the product identified above is in conformity with this set of declared performance/s. This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011 under the sole responsibility of the manufacturer identified above.

Signed for and on behalf of the manufacturer by:

**Name:** Nathan Hatch

**Function:** Product Engineer

**At (place):** CommScope, Claremont, NC USA

**on (date of issue):** 2021-12-01

**Signature:**  .....

# Certificate of Registration

## QUALITY MANAGEMENT SYSTEM - ISO 9001:2015

This is to certify that:

Arris Indústria Eletrônica do Brasil  
Ltda.  
CNPJ: 09.154.836/0001-15  
Avenida Torquato Tapajós, 9475  
Tarumã  
Manaus  
Amazonas  
69041-025  
Brasil

Holds Certificate No:


**FM 752494**

and operates a Quality Management System which complies with the requirements of ISO 9001:2015 for the following scope:

Manufacture of Television Signal Receivers / Decoders and Modems / Routers.

This certificate is traceable to the certificate number SGQ-2276 originally issued by TÜV Rheinland do Brasil Ltda. in 2009-10-09.

For and on behalf of BSI:

  
Carlos Pitanga, Chief Operating Officer Assurance – Americas

Original Registration Date: 2009-10-09

Latest Revision Date: 2021-09-24

Effective Date: 2021-10-09

Expiry Date: 2024-10-08

Page: 1 of 1



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To be read in conjunction with the scope above or the attached appendix.

BSI Brasil: Rua Gomes de Carvalho, 1306 - 11º andar - Cjs.: 111/112, Vila Olímpia - São Paulo - SP - 04547-005 Telephone: +55 11-21489600

Americas Headquarters: BSI Group America Inc., 12950 Worldgate Drive, Suite 800, Herndon, VA 20170-6007 USA  
A Member of the BSI Group of Companies.

# Certificate of Registration

## ENVIRONMENTAL MANAGEMENT SYSTEM - ISO 14001:2015

This is to certify that:

CommScope, Inc. of North Carolina  
1100 CommScope Place SE  
Hickory  
North Carolina  
28603-0339  
USA


Holds Certificate No:

**EMS 648387**

and operates an Environmental Management System which complies with the requirements of ISO 14001:2015 for the following scope:

The environmental management system to control the risks associated with the manufacture, distribution, field support and central function of telecommunication products and services.

For and on behalf of BSI:

  
Carlos Pitanga, Chief Operating Officer Assurance – Americas

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 1 of 5



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Certificate No: **EMS 648387**

Location	Registered Activities
Andrew Telecommunications de Reynosa S. de R.L. de C.V. Av. Industrial Reynosa Lte 2 al 5 Parque Industrial Center Reynosa Tamaulipas 88780 Mexico	Manufacture and distribution of telecommunication products including antenna and cable.
CommScope Asia (Suzhou) Technologies Co., Ltd. EPZ II, 77 Qiming Road Suzhou Industrial Park Suzhou Jiangsu 215121 China	Manufacture and distribution of telecommunication products, including cable.
Andrew Telecommunications India Pvt. Ltd. Plot No. N-2, Phase IV Verna Industrial Estate Verna Salcette Goa 403 722 India	Manufacture and distribution of telecommunication products, including antenna and cable.
CommScope EMEA Ltd. Corke Abbey Avenue Bray County Dublin A98FY03 Ireland	Manufacture and distribution of telecommunication products, including cable and connectors.
CommScope Telecommunications (China) Co., Ltd. 68 West Su Hong Xi Lu Suzhou Industrial Park Suzhou Jiangsu 215021 China	Manufacture and distribution of telecommunication products, including antenna and cables.

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 2 of 5

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Information and Contact: BSI, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP. Tel: + 44 345 080 9000  
BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.  
A Member of the BSI Group of Companies.

Certificate No: **EMS 648387**

Location	Registered Activities
Andrew Wireless Systems GmbH Industriering 10 Buchdorf 86675 Germany	Manufacture and distribution of telecommunication products, including amplifiers and antenna systems.
CommScope, Inc. of North Carolina 1100 CommScope Place SE Hickory North Carolina 28603-0339 USA	Corporate headquarters responsible for management system oversight of all locations listed on this certificate.
CommScope Inc. 6519 CommScope Road Catawba North Carolina 28609-0199 USA	Manufacture and distribution of telecommunication products, including cable.
CommScope Inc. 3642 US Hwy 70 East Claremont North Carolina 28610-0879 USA	Manufacture and distribution of telecommunication products, including cable.
CommScope Czech Republic s.r.o. Turanka 98B Brno 62700 Czech Republic	Manufacture and distribution of telecommunication products, including connectors and terminations.
CommScope Inc. of North Carolina 1100 CommScope Place SE Hickory North Carolina 28603-0339 USA	Customer care, facility maintenance, and administrative functions.
ADC de Delicias, S. de R.L. de C.V. Blvd. Fernando Baeza No. 1301 Sur Delicias Chihuahua 33000 Mexico	Manufacturing and distribution of telecommunication products.

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 3 of 5

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Certificate No: **EMS 648387**

Location	Registered Activities
ADC de Juarez S. de R.L. de C.V. Parque Industrial Antonio J Bermudez Ciudad Juarez Chihuahua 32470 Mexico	Manufacturing and distribution of telecommunication products.
CommScope Connectivity Belgium bvba Diestsesteenweg 692 Kessel-lo 3010 Belgium	Manufacture and distribution of telecommunication products.
CommScope Technologies de Juarez S. de R.L. de C.V. Santiago Troncoso 331 Praderas del Sur, Ciudad Juarez Chihuahua 32575 Mexico	Manufacture of Fiber Optic Splice Closures (FOSC), Fiber Guide Systems (FGS), Hardened Connectivity and Molding-Gel Filling, including: plastic injection molding, plastic extrusion, plastic and metal machining, and assembly operations.
CommScope Connectivity UK Limited Unit 1 Kinmel Park Bodelwyddan Rhyl, Denbighshire LL18 5TZ United Kingdom	Fibre optic cable manufacturing, termination and design of other telecommunication products and services.
CommScope 11312 S. Pipeline Road Eules Texas 76040 USA	Manufacture, distribution, field support and central function of telecommunication products.
ARRIS GROUP DE MEXICO SA DE CV Av. De la Paz, #11721 Parque Industrial Pacifico Tijuana Baja California 22643 Mexico	Manufacture, repair, support, repair service, distribution of products and components for telecommunications that provide integrated solutions for voice, video and data through the processes of SMT, manual and mechanical assembly, soldering (manual, selective, printed, wave) electrical testing and packaging.

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BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.

A Member of the BSI Group of Companies.



Certificate No: **EMS 648387**

Location	Registered Activities
CommScope Design & Integration UK Ltd Unit 5 & 6, Eden Business Park Edenhouse Drive Old Malton Malton YO17 6AE United Kingdom	Manufacture and distribution of telecommunications products including cabinets.
Arris Indústria Eletrônica do Brasil Ltda. CNPJ: 09.154.836/0001-15 Avenida Torquato Tapajós, 9475 Tarumã Manaus Amazonas 69041-025 Brasil	Manufacturer and distribution of Receivers, Television signal Decoders and Modulator/Router.
CommScope Design and Integration UK Ltd. Lovell House, 412 The Quadrant Birchwood Park Warrington WA3 6FW United Kingdom	Telecommunications project management, site surveys, installations commissioning and rigging.

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

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# CERTIFICATE

Certificate Number: 151045.000

TLID: TL1786

With Five Page Addendum

The Quality Management System and implementation of:

**CommScope, Inc.**

With Virtual Central Function at:

1100 CommScope Place SE

Hickory, NC 28602

United States

meets the requirements of the standard:

## TL 9000 – H, S, V R6.2/R5.6 (Based on and including ISO 9001:2015)

### Scope:

The sales, marketing, design, manufacture, test, repair, support, service, and distribution of telecommunications products, components, and services for the telecommunications, wireless, and broadcast networks industries

Product Categories	Products
3.2.5 Fiber to the User	ASWXXXX, OLT (GPON)
3.2.6.2 Video Transmission Equipment	EQAM Products (APEX, SFP), Switched Digital Video and Resource Mgmt, Network Encryption (NE), ALOHA Interactive (ARPD, ADM, SDM), Cablevista Edge Decoder, Conditional Access Products
4.2.2.1 On line Non-critical	ECO Edge, ECO Service Management
6.2.5 Passive Optical Network Termination Units	ONT-1xxxx, ONT1xxx
6.2.6.1 Set Top Box	Digital Video Set Tops (VMS Series , IPC series)
3.1.1.1.1 Metallic Conductor Cable	All Products
3.1.1.1.2 Metallic Connectors	All Products
3.1.1.2.1 Fiber Optic Cable	All Products
3.1.1.2.2 Optical Connector	All Products
3.1.1.3.2 Passive Optical Subsystems	All Products
3.1.1.3.4.1 Radio Antenna Systems	All Products
3.1.2.1 Enclosures	All Products
3.1.2.3 Conduit	All Products
3.2.1.1 Manual Cross Connect Systems	All Products
8.1.4 Mechanical and Electromechanical	All Products
8.3 Cable Assemblies	All Products

**Certification Structure:** Multi-site

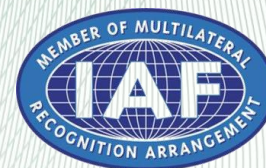
Certificate Expires: January 04, 2023

Certificate Reissued: September 03, 2021

Certificate Issued: January 05, 2021

Certified Since: August 8, 1994

Dr. Cem O. Onus  
Managing Director, Business Assurance  
DEKRA Certification, Inc.  
1120 Welsh Road, Suite 210  
North Wales, PA 19454 USA  
(215) 997-4519  
[dekra-certification.us](http://dekra-certification.us)





# CERTIFICATE ADDENDUM

Certificate Number: 151045.000

ADDENDUM Page One of Five

The Quality Management System and implementation of:

## CommScope, Inc.

meets the requirements of the standard:

## TL 9000 – H, S, V R6.2/R5.6

(Based on and including ISO 9001:2015)

Site Activities Legend:	HQ = Headquarters	MFG = Manufacturing	SER = Services, (Professional Services and/or Technical Support)
	HW DE= Hardware Development	REP = Repair	SC = Purchasing, Supplier Management, Manufacturing Support, Repair Support
	SW DE= Software Development	SAL = Sales, Marketing	

Site Address	Certification	Product Category	Site Activities
CommScope, Inc 1100 CommScope Place SE Hickory, NC 28602 United States	TL9000HSV	3.1.1.1.1, 3.1.1.1.2, 3.1.1.2.1, 3.1.1.2.2, 3.1.1.3.2, 3.1.1.3.4.1, 3.1.2.1, 3.1.2.3, 3.2.1.1, 3.2.5, 3.2.6.24.2.2.1, 6.2.5, 6.2.6.1, 8.1.4, 8.3	HQ (Virtual)
ARRIS Technology, Inc. 101 Tournament Dr. Horsham, PA 19044 United States	TL9000HSV	3.2.6.2, 6.2.6.1	HW & SW DE, SAL, SER, SC
ARRIS Technology, Inc. 900 Chelmsford St. Lowell, MA 01851 United States	TL9000HSV	3.2.5, 3.2.6.2, 6.2.5, 6.2.6.1	HW & SW DE, SAL, SER, SC

Certificate Expires: January 04, 2023  
Certificate Reissued: September 03, 2021  
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# CERTIFICATE ADDENDUM

Certificate Number: 151045.000  
ADDENDUM Page Two of Five

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**TL 9000 – H, S, V R6.2/R5.6**  
(Based on and including ISO 9001:2015)

<u>Site Address</u>	<u>Certification</u>	<u>Product Category</u>	<u>Site Activities</u>
ARRIS Technology, Inc. 6450 Sequence Drive San Diego, CA 92121 United States	TL9000HSV	3.2.6.2, 6.2.6.1	HW & SW DE, SAL, SER, SC
ARRIS Solutions, Inc. 2400 Ogden Ave., Suite 180 Lisle, IL 60532 United States	TL9000H	3.1.1.1.2, 3.2.5, 3.2.6.2, 6.2.5, 6.2.6.1, 8.3	SC, HW DE, SAL
ARRIS Technology, Inc. 2450/2500 Walsh Avenue Santa Clara, CA 95051 United States	TL9000SV	3.2.6.2	SER, SC
ARRIS Solutions, Inc. 4516 Seton Center Parkway Suite 185 Austin, Texas 78759	TL9000SV	4.2.2.1	SW DE, SER
ARRIS Technology (Shenzhen) Co., Ltd. South & East Wing, 4F, Block 2 Vision (Shenzhen) Business Park Shenzhen P.R. China	TL9000S	3.2.6.2	SW DE
ARRIS Technology (Hangzhou) Company Limited, Beijing Branch No. 1 Wang Jing East Road Chao Yang Dist. 100102 Beijing, P.R. China	TL9000V	3.2.5, 3.2.6.2, 6.2.5, 6.2.6.1	SER, SAL, SC
ARRIS Solutions UK Limited 710 Wharfedale Road IQ Winnersh Wokingham Berkshire RG41 5TP United Kingdom	TL9000V	3.2.5, 3.2.6.2, 6.2.5, 6.2.6.1	SAL, SER

Certificate Expires: January 04, 2023  
Certificate Reissued: September 03, 2021  
Certificate Issued: January 05, 2021  
Certified Since: August 8, 1994



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# CERTIFICATE ADDENDUM

Certificate Number: 151045.000  
ADDENDUM Page Three of Five

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

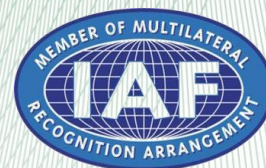
**TL 9000 – H, S, V R6.2/R5.6**  
**(Based on and including ISO 9001:2015)**

Site Address	Certification	Product Category	Site Activities
ARRIS de Mexico, SA de C.V. Via de la Innovacion # 402; CP 66628 Parque de Investigacion e Innovacion Tecnologica Apodaca Nuevo León; Mexico	TL9000HS	3.2.5, 3.2.6.2, 6.2.5, 6.2.6.1	HW & SW DE, REP
ARRIS Group de Mexico S.A. de C.V. Av. La Paz 11721 Parque Industrial Pacifico Tijuana, BC 22643 Mexico	TL9000H	3.1.1.3.4.1, 3.2.6.2, 3.2.5	MFG SC, REP
CommScope Technologies LLC 2601 Telecom Parkway Richardson, TX 75082 United States	TL9000H	3.1.1.3.4.1, 3.1.2.1	HW DE
CommScope Telecommunications (China) Co. Ltd. No. 68 Su Hong XI Lu Suzhou Industrial Park, Suzhou Jiangsu 215021 Peoples Republic of China	TL9000H	3.1.1.1.1, 3.1.1.2, 3.1.1.3.4.1, 8.3	HW DE, MFG
CommScope Connectivity (Suzhou) Co. Ltd. 77 Qiming Road, Suzhou Industrial Park Suzhou, Jiangsu 215121 Peoples Republic of China	TL9000H	3.1.1.3.2, 3.1.1.2.2, 3.1.1.1.2, 3.2.1.1., 8.3	HW DE, MFG
Andrew Wireless Systems GmbH Industriering 10 Buchdorf Bavaria 86675 GERMANY	TL9000H	3.1.1.3.4.1	HE DE, REP, MFG

Certificate Expires: January 04, 2023  
Certificate Reissued: September 03, 2021  
Certificate Issued: January 05, 2021  
Certified Since: August 8, 1994



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# CERTIFICATE ADDENDUM

Certificate Number: 151045.000  
ADDENDUM Page Four of Five

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**TL 9000 – H, S, V R6.2/R5.6**  
**(Based on and including ISO 9001:2015)**

<u>Site Address</u>	<u>Certification</u>	<u>Product Category</u>	<u>Site Activities</u>
CommScope India Private Ltd Plot No. N-2, Verna Industrial Estate Phase IV, Verna - Salcette, GOA 403 722 INDIA	TL9000H	3.1.1.1.1, 3.1.1.1.2, 3.1.1.3.4.1, 8.3	HW DE, MFG
CommScope Italy srl Via Mengolina 20, Faenza Ravenna 48018 Italy	TL9000H	3.1.1.3.4.1	HW DE
Andrew Telecommunications de Reynosa, S. De R.L. de C. V. Ave. Industrial Reynosa Lote 2 al 5, Col Parque Industrial Reynosa, Reynosa Tamaulipas 88780 Mexico	TL9000H	3.1.1.3.4.1, 3.1.1.1.2, 3.1.2.1, 8.3	MFG
CommScope Corporation Mexico, S.A. de C.V. CCS Ave. Antonio J. Bermudez #550 Parque Ind. A. J. Bermudez Ciudad Juarez CHIH 32470 Mexico	TL9000H	3.1.1.3.2, 3.1.1.2.2, 3.1.2.3, 3.2.1.1, 8.3	HW DE, MFG
CommScope Corporation Mexico, S.A. de C.V. Santiago Troncoso No. 331, Cd. Juarez CHIH 32599 Mexico	TL9000H	3.1.1.3.2, 3.1.1.2.2, 3.1.2.3, 3.2.1.1, 8.3	MFG
ADC de Delicias S. De R.L. de C.V Boulevard Fernando Baeza #1301 Fraccionamiento San Marcos Ciudad Delicias Mexico	TL9000H	3.1.1.3.2, 3.1.1.2.2, 3.1.2.3, 3.2.1.1, 8.3	MFG
CommScope Technologies UK Ltd Lomond House, Grantsmuir John Smith Business Park Kirkcaldy, Fife KY2 6NA Scotland	TL9000H	8.1.4	HW DE, SAL

Certificate Expires: January 04, 2023  
Certificate Reissued: September 03, 2021  
Certificate Issued: January 05, 2021  
Certified Since: August 8, 1994



Dr. Cem O. Onus  
Managing Director, Business Assurance  
DEKRA Certification, Inc.  
1120 Welsh Road, Suite 210  
North Wales, PA 19454 USA  
(215) 997-4519  
[dekra-certification.us](http://dekra-certification.us)





# CERTIFICATE ADDENDUM

Certificate Number: 151045.000  
ADDENDUM Page Five of Five

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**TL 9000 – H, S, V R6.2/R5.6**  
**(Based on and including ISO 9001:2015)**

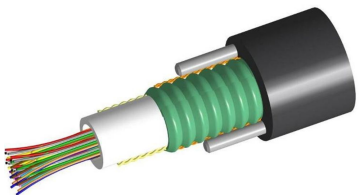
<u>Site Address</u>	<u>Certification</u>	<u>Product Category</u>	<u>Site Activities</u>
CommScope Inc of North Carolina 1130 Classic Rd Apex, NC 27539 United States	TL9000H	3.1.1.2.2	HW DE, SAL
CommScope Technologies LLC 140 Vista Centre Drive Forest, VA 24551 United States	TL9000H	3.1.1.3.4.1	HW DE, SW DE
CommScope Technologies LLC 19700 Janelia Farm Blvd Ashburn, VA 21047 United States	TL9000H	3.1.1.3.4.1	HW & SW DE, REP
CommScope Technologies LLC 11312 S. Pipeline Road Eules, TX 76040 United States	TL9000H	8.1.4	HW DE, MFG, SAL
CommScope Connectivity LLC 501 Shenandoah Drive Shakopee MN 55379 United States	TL9000	3.1.1.3.2, 3.1.1.2.2, 3.1.2.2.3, 3.2.1.1, 8.3	HW DE, SAL, SER, SC, SW DE
CommScope Inc of North Carolina 6519 CommScope Road, Catawba, NC 28609-0199 United States	TL9000	3.1.1.1.1, 3.1.1.1.2	HW DE, MFG, SAL
CommScope Inc of North Carolina 3642 US Hwy. 70 East Claremont NC 28610 United States	TL9000	3.1.1.1.1, 3.1.1.2.2, 3.1.1.2.1	HW DE, MFG, SAL

Certificate Expires: January 04, 2023  
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[dekra-certification.us](http://dekra-certification.us)





Fiber OSP cable, TeraSPEED® Single Jacket/Single Armor, Gel-Filled, Outdoor Central Tube, 12 fibers, Singlemode G.652.D and G.657.A1, Feet jacket marking, Black jacket color

- Corrugated steel tape armor is strong yet flexible, providing additional crush and rodent protection

## Product Classification

Regional Availability	Asia   Australia/New Zealand   EMEA   Latin America   North America
Portfolio	CommScope®
Product Type	Fiber OSP cable
Product Series	O-CA

## General Specifications

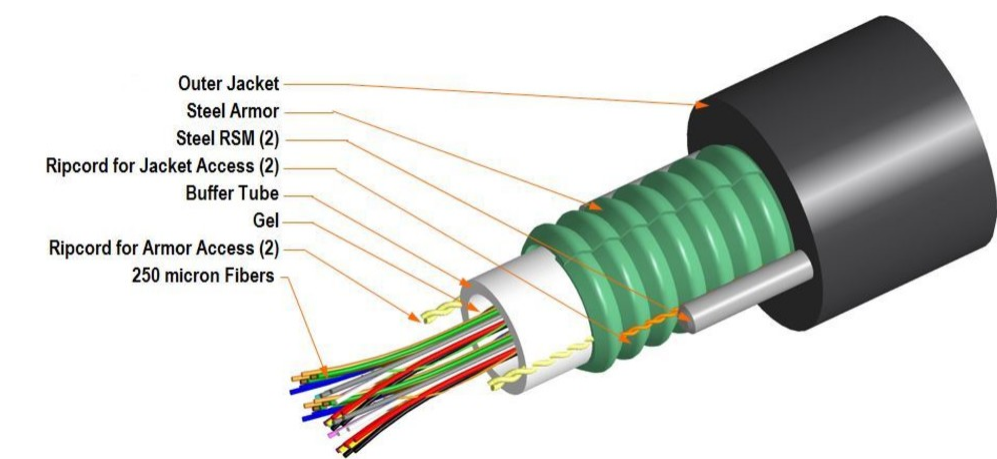
Armor Type	Corrugated steel
Cable Type	Central loose tube
Construction Type	Armored
Fiber Type, quantity	12
Fibers per Subunit, quantity	12
Jacket Color	Black
Jacket Marking	Feet
Subunit Type	Gel-filled
Subunit, quantity	1
Total Fiber Count	12

## Dimensions

Buffer Tube/Subunit Diameter	4 mm   0.157 in
Diameter Over Jacket	11 mm   0.433 in

## Representative Image





Material Specifications

Jacket MaterialPE

Mechanical Specifications

Minimum Bend Radius, loaded	165 mm   6.496 in
Minimum Bend Radius, unloaded	110 mm   4.331 in
Tensile Load, long term, maximum	800 N   179.847 lbf
Tensile Load, short term, maximum	2700 N   606.984 lbf
Compression	44 N/mm   251.246 lb/in
Compression Test Method	FOTP-41   IEC 60794-1 E3
Flex	25 cycles
Flex Test Method	FOTP-104   IEC 60794-1 E6
Impact	2.94 N-m   26.021 in lb
Impact Test Method	FOTP-25   IEC 60794-1 E4
Strain	See long and short term tensile loads
Strain Test Method	FOTP-33   IEC 60794-1 E1
Twist	10 cycles
Twist Test Method	FOTP-85   IEC 60794-1 E7
Vertical Rise, maximum	607 m   1,991.47 ft

Optical Specifications

Fiber TypeG.652.D and G.657.A1, TeraSPEED® | OS2



## Environmental Specifications

Installation temperature	-30 °C to +70 °C (-22 °F to +158 °F)
Operating Temperature	-40 °C to +70 °C (-40 °F to +158 °F)
Storage Temperature	-40 °C to +75 °C (-40 °F to +167 °F)
Cable Qualification Standards	ANSI/ICEA S-87-640   EN 187105   Telcordia GR-20
Environmental Space	Aerial, lashed   Buried
Jacket UV Resistance	UV stabilized
Water Penetration	24 h
Water Penetration Test Method	FOTP-82   IEC 60794-1 F5

## Environmental Test Specifications

Cable Freeze	-2 °C   28.4 °F
Cable Freeze Test Method	FOTP-98   IEC 60794-1 F15
Drip	70 °C   158 °F
Drip Test Method	FOTP-81   IEC 60794-1 E14
Heat Age	-40 °C to +85 °C (-40 °F to +185 °F)
Heat Age Test Method	IEC 60794-1 F9
Low High Bend	-30 °C to +60 °C (-22 °F to +140 °F)
Low High Bend Test Method	FOTP-37   IEC 60794-1 E11
Temperature Cycle	-40 °C to +70 °C (-40 °F to +158 °F)
Temperature Cycle Test Method	FOTP-3   IEC 60794-1 F1

## Packaging and Weights

Cable weight	135 kg/km   90.716 lb/kft
--------------	---------------------------

## Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a>
ROHS	Compliant
UK-ROHS	Compliant

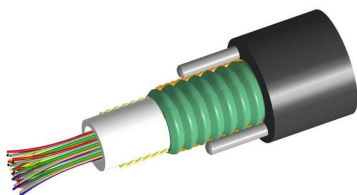


## Included Products

CS-8W-LT – TeraSPEED® G652D/G657A1 Singlemode  
Fiber

## \* Footnotes

**Operating Temperature** Specification applicable to non-terminated bulk fiber cable



Fiber OSP cable, TeraSPEED® Single Jacket/Single Armor, Gel-Filled, Outdoor Central Tube, 12 fibers, Singlemode G.652.D and G.657.A1, Feet jacket marking, Black jacket color

- Corrugated steel tape armor is strong yet flexible, providing additional crush and rodent protection

## Product Classification

Regional Availability	Asia   Australia/New Zealand   EMEA   Latin America   North America
Portfolio	CommScope®
Product Type	Fiber OSP cable
Product Series	O-CA

## General Specifications

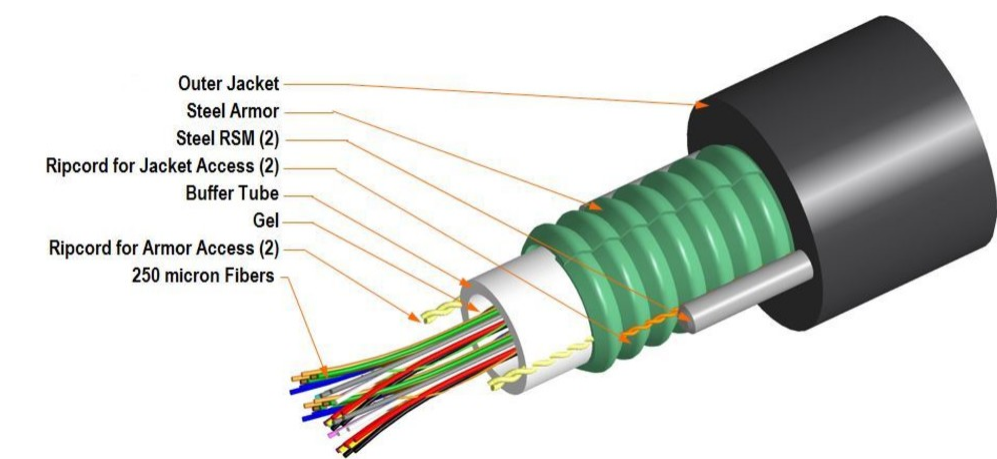
Armor Type	Corrugated steel
Cable Type	Central loose tube
Construction Type	Armored
Subunit Type	Gel-filled
Jacket Color	Black
Jacket Marking	Feet
Subunit, quantity	1
Fibers per Subunit, quantity	12
Total Fiber Count	12

## Dimensions

Buffer Tube/Subunit Diameter	4 mm   0.157 in
Diameter Over Jacket	11 mm   0.433 in

## Representative Image





Material Specifications

Jacket Material

PE

Mechanical Specifications

Minimum Bend Radius, loaded	165 mm   6.496 in
Minimum Bend Radius, unloaded	110 mm   4.331 in
Tensile Load, long term, maximum	800 N   179.847 lbf
Tensile Load, short term, maximum	2700 N   606.984 lbf
Compression	44 N/mm   251.246 lb/in
Compression Test Method	FOTP-41   IEC 60794-1 E3
Flex	25 cycles
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Impact	2.94 N-m   26.021 in lb
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Strain	See long and short term tensile loads
Strain Test Method	FOTP-33   IEC 60794-1 E1
Twist	10 cycles
Twist Test Method	FOTP-85   IEC 60794-1 E7
Vertical Rise, maximum	607 m   1,991.47 ft

Optical Specifications

Fiber Type

G.652.D and G.657.A1, TeraSPEED® | OS2

## Environmental Specifications

Installation temperature	-30 °C to +70 °C (-22 °F to +158 °F)
Operating Temperature	-40 °C to +70 °C (-40 °F to +158 °F)
Storage Temperature	-40 °C to +75 °C (-40 °F to +167 °F)
Cable Qualification Standards	ANSI/ICEA S-87-640   EN 187105
Environmental Space	Aerial, lashed   Buried
Jacket UV Resistance	UV stabilized
Water Penetration	24 h
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Cable Freeze	-2 °C   28.4 °F
Cable Freeze Test Method	FOTP-98   IEC 60794-1 F15
Drip	70 °C   158 °F
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Temperature Cycle	-40 °C to +70 °C (-40 °F to +158 °F)
Temperature Cycle Test Method	FOTP-3   IEC 60794-1 F1

## Packaging and Weights

Cable weight	135 kg/km   90.716 lb/kft
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## Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a>
ROHS	Compliant
UK-ROHS	Compliant



## Included Products

CS-8W-LT – TeraSPEED® G652D/G657A1 Singlemode Fiber

## \* Footnotes

**Operating Temperature** Specification applicable to non-terminated bulk fiber cable



TeraSPEED®

Product Classification

Portfolio	CommScope®
Product Type	Optical fiber

General Specifications

Cladding Diameter	125 µm
Cladding Diameter Tolerance	±0.7 µm
Cladding Non-Circularity, maximum	0.7 %
Coating Diameter (Colored)	249 µm
Coating Diameter (Uncolored)	242 µm
Coating Diameter Tolerance (Colored)	±13 µm
Coating Diameter Tolerance (Uncolored)	±5 µm
Coating/Cladding Concentricity Error, maximum	12 µm
Core Diameter	8.3 µm
Core/Clad Offset, maximum	0.5 µm
Proof Test	689.476 N/mm²   100000 psi

Dimensions

Fiber Curl, minimum	4 m   13.123 ft
---------------------	-----------------

Mechanical Specifications

Macrobending, 20 mm Ø mandrel, 1 turn	0.75 dB @ 1,550 nm   1.50 dB @ 1,625 nm
Macrobending, 30 mm Ø mandrel, 10 turns	0.25 dB @ 1,550 nm   1.00 dB @ 1,625 nm
Macrobending, 60 mm Ø mandrel, 100 turns	0.05 dB @ 1,550 nm   0.05 dB @ 1,625 nm
Coating Strip Force, maximum	8.9 N   2.001 lbf

# CS-8W-LT

Coating Strip Force, minimum	1.3 N   0.292 lbf
Dynamic Fatigue Parameter, minimum	20

## Optical Specifications

Cabled Cutoff Wavelength, maximum	1260 nm
Point Defects, maximum	0.1 dB
Zero Dispersion Slope, maximum	0.092 ps/[km-nm-nm]
Zero Dispersion Wavelength, maximum	1324 nm
Zero Dispersion Wavelength, minimum	1300 nm

## Optical Specifications, Wavelength Specific

Attenuation, maximum	0.22 dB/km @ 1,550 nm   0.25 dB/km @ 1,490 nm   0.25 dB/km @ 1,625 nm   0.36 dB/km @ 1,310 nm   0.36 dB/km @ 1,385 nm
Attenuation, typical	0.19 dB/km @ 1,550 nm   0.33 dB/km @ 1,310 nm
Backscatter Coefficient	-79.6 dB @ 1,310 nm   -82.1 dB @ 1,550 nm
Dispersion, maximum	18 ps(nm-km) at 1550 nm   3.5 ps(nm-km) from 1285 nm to 1330 nm at 1310 nm
Index of Refraction	1.467 @ 1,310 nm   1.467 @ 1,385 nm   1.468 @ 1,550 nm
Mode Field Diameter	10.4 µm @ 1,550 nm   9.2 µm @ 1,310 nm   9.6 µm @ 1,385 nm
Mode Field Diameter Tolerance	±0.4 µm @ 1310 nm   ±0.5 µm @ 1550 nm   ±0.6 µm @ 1385 nm
Polarization Mode Dispersion Link Design Value, maximum	0.04 ps/sqrt(km)
Standards Compliance	IEC 60793-2-10, edition 6, model A1a.4   ITU-T G.652.D   ITU-T G.657.A1   TIA-492CAAB (OS2)

## Environmental Specifications

Heat Aging, maximum	0.05 dB/km @ 85 °C
Temperature Dependence, maximum	0.05 dB/km
Temperature Humidity Cycling, maximum	0.05 dB/km
Water Immersion, maximum	0.05 dB/km @ 23 °C

## Regulatory Compliance/Certifications

Agency	Classification
--------	----------------

# CS-8W-LT

ISO 9001:2015

Designed, manufactured and/or distributed under this quality management system



## \* Footnotes

<b>Temperature Dependence, maximum</b>	Temperature dependence is conducted at -60 °C to +85 °C (-76 °F to +185 °F)
<b>Temperature Humidity Cycling, maximum</b>	Temperature humidity cycling is conducted at -10 °C to +85 °C (+14 °F to +185 °F) up to 95% relative humidity



August 2, 2016

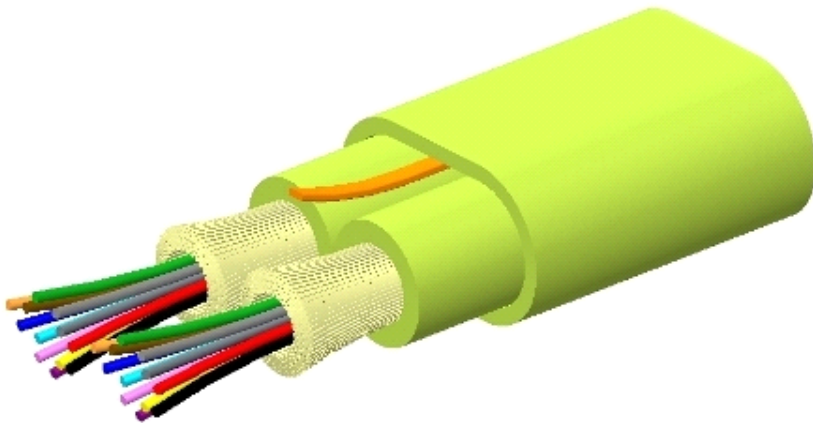
## CommScope WBMMF Testing Certified by Intertek

*-Believed to be industry's first confirmed successful test of wavelengths beyond 850 nm-*

HICKORY, N.C.--(BUSINESS WIRE)-- [Wideband multimode fiber \(WBMMF\)](#) is an innovative solution allowing IT and data center managers to build cost effective infrastructure that can support bandwidth needs today and in the future.

This Smart News Release features multimedia. View the full release here:

<http://www.businesswire.com/news/home/20160802005263/en/>



Intertek, a leading total quality assurance provider to industries worldwide, recently certified CommScope's WBMMF testing facility in Richardson, Texas for its measurement setup and technique. (Photo: Business Wire)

"This testing and certification validates CommScope's commitment to its state-of-the-art DMD testing capability that is critical for new product development," said David Brown, senior vice president, Research and Development, CommScope. "With Intertek as our witness, our certified testing will increase customer confidence in our laboratory measurements."

Brown added the certification allows CommScope to continue developing its innovative WBMMF solutions. This, coupled with transceivers using wavelength division multiplexing and/or pulse-amplitude modulation technology, provides a path for CommScope customers to grow their fiber throughput capacity from 10G to 100G and beyond with maximum fiber reach and minimum fiber count, enabling them to cost-effectively keep pace with the bandwidth explosion.

"Our customers and the industry expect leadership from CommScope and we are doing that by providing innovative, certified solutions that adhere to important industry standards," Brown said.

"Intertek is pleased to provide its expertise in certifying standards compliance to the DMD bench at CommScope's facility," said Antoine Pelletier, project engineer, Intertek. "CommScope's DMD bench met the measurement standard's requirements and properly graded the performance of fibers used in CommScope's [LazrSPEED®](#) cables with respect to the TIA-492 series requirements."

Click [here](#) to download the Intertek witness report.

### Related Blog Posts and Videos:

[The Impact of SWDM over Multimode Fiber](#)

[How to Achieve High Efficiency in Connectivity](#)

[The Next Generation of Multimode Fiber](#)

[Intertek](#), a leading total quality assurance provider to industries worldwide, [recently certified](#) CommScope's WBMMF testing facility in Richardson, Texas for its measurement setup and technique stating "it satisfies the current [Telecommunication Industry Association's](#) (TIA) standard (TIA-455-220-A)."

Intertek witnessed CommScope's differential mode delay (DMD) testing of WBMMF at 850, 880, 910 and 953 nm. This marks what CommScope believes to be the industry's first confirmed successful test of wavelengths beyond 850 nm, an important step in verifying fiber performance for emerging shortwave wavelength division multiplexing systems. The fibers also met the TIA-492AAAC, TIA-492AAD and TIA-492AAAE standards, Intertek stated.

[Next Generation Multimode Fiber Gains Support](#)

[The Arrival of WideBand Multimode Fiber](#)

[The Widening Horizon for Multimode Fiber in Buildings and Data Centers](#)

[Ethernet, the Road Ahead](#)

[VIDEO: LazrSPEED WideBand Multimode Fiber by CommScope](#)

[VIDEO: Wideband Multimode Fiber - What is it and why does it make sense?](#)

[VIDEO: CommScope Engineering Fellow talks next-gen fiber](#)

*LazrSPEED is a registered trademark of CommScope, Inc.*

## **About CommScope**

[CommScope](#) (NASDAQ: COMM) helps companies around the world design, build and manage their wired and wireless networks. Our vast portfolio of network infrastructure includes some of the world's most robust and innovative wireless and fiber optic solutions. Our talented and experienced global team is driven to help customers increase bandwidth; maximize existing capacity; improve network performance and availability; increase energy efficiency; and simplify technology migration. You will find our solutions in the largest buildings, venues and outdoor spaces; in data centers and buildings of all shapes, sizes and complexity; at wireless cell sites; in telecom central offices and cable headends; in FTTx deployments; and in airports, trains, and tunnels. Vital networks around the world run on CommScope solutions.

Follow us on [Twitter](#), [LinkedIn](#) and [Instagram](#), and like us on [Facebook](#).

Sign up for our [press releases](#) and [blog posts](#).

This press release includes forward-looking statements that are based on information currently available to management, management's beliefs, as well as on a number of assumptions concerning future events. Forward-looking statements are not a guarantee of performance and are subject to a number of uncertainties and other factors, which could cause the actual results to differ materially from those currently expected. In providing forward-looking statements, the company does not intend, and is not undertaking any obligation or duty, to update these statements as a result of new information, future events or otherwise.

View source version on [businesswire.com](#): <http://www.businesswire.com/news/home/20160802005263/en/>

## **News Media Contact:**

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+1 828-431-9803 or [publicrelations@commscope.com](mailto:publicrelations@commscope.com)

or

## **Financial Contact:**

Jennifer Crawford, CommScope  
+1 828-323-4970

Source: CommScope

News Provided by Acquire Media

# CERTIFICATE

Certificate Number: 151045.000

TLID: TL1786

With Eight Page Addendum

The Quality Management System and implementation of:

## CommScope, Inc.

With Virtual Central Function at:

1100 CommScope Place SE

Hickory, NC 28602

United States

meets the requirements of the standard:

## TL 9000 – H, S, V R6.3/R5.7 (Based on and including ISO 9001:2015)

### Scope:

The sales, marketing, design, manufacture, test, repair, support, service, and distribution of telecommunications products, components, and services for the telecommunications, wireless, and broadcast networks industries

Product Categories	Products
3.2.5 Fiber to the User	ASWXXXX, OLT (GPON)
3.2.6 Video Transmission Equipment	EQAM Products (APEX, SFP), Switched Digital Video and Resource Mgmt, Network Encryption (NE), ALOHA Interactive (ARPD, ADM, SDM), Cablevista Edge Decoder, Conditional Access Products
6.2.5 Passive Optical Network Termination Units	ONT-1xxxx, ONT1xxx
3.1.1.1.1 Metallic Conductor Cable	All Products
3.1.1.1.2 Metallic Connectors	All Products
3.1.1.2.1 Fiber Optic Cable	All Products
3.1.1.2.2 Optical Connector	All Products
3.1.1.3.2 Passive Optical Transmission Subsystems	All Products
3.1.1.3.4 Fixed Antenna Systems	All Products
3.1.2.1 Enclosures	All Products
3.1.2.3 Conduits	All Products
3.2.1.1 Manual Cross Connect Systems	All Products
8.1.4 Electromechanical Components	All Products
8.3 Cable Assemblies	All Products

**Certification Structure:** Multi-site

Certificate Expires: January 04, 2026

Certificate Issued: January 05, 2023

Certified Since: August 08, 1994



Dr. Cem O. Onus  
Managing Director

DEKRA Certification, Inc.

1945 The Exchange SE #300

Atlanta, GA 30339 USA

(215) 997-4519

[dekra-certification.us](http://dekra-certification.us)





# CERTIFICATE ADDENDUM

Certificate Number: 151045.000

ADDENDUM Page One of Eight

The Quality Management System and implementation of:

## CommScope, Inc.

meets the requirements of the standard:

## TL 9000 – H, S, V R6.3/R5.7

(Based on and including ISO 9001:2015)

<b>Site Activities Legend:</b>	HQ = Headquarters	MFG = Manufacturing	SER = Services, (Professional Services and/or Technical Support)
	HW DE= Hardware Development	REP = Repair	SC = Purchasing, Supplier Management, Manufacturing Support, Repair Support
	SW DE= Software Development	SAL = Sales, Marketing	

Site Address	Certification	Product Category	Site Activities
CommScope, Inc 1100 CommScope Place SE Hickory, NC 28602 United States	TL9000HSV	3.1.1.1.1, 3.1.1.1.2, 3.1.1.2.1, 3.1.1.2.2, 3.1.1.3.2, 3.1.1.3.4, 3.1.2.1, 3.1.2.3, 3.2.1.1, 3.2.5, 3.2.6, 6.2.5, 8.1.4, 8.3	HQ (Virtual)
ARRIS Technology, Inc. 900 Chelmsford St. Lowell, MA 01851 United States	TL9000HSV	3.2.5, 3.2.6, 6.2.5, 3.1.1.3.4	HW & SW DE, SER, SC
ARRIS Technology, Inc. 6450 Sequence Drive San Diego, CA 92121 United States	TL9000SV	3.2.6	SW DE, SER
ARRIS Solutions, Inc. 2400 Ogden Ave., Suite 180 Lisle, IL 60532 United States	TL9000H	3.1.1.1.2, 3.2.5, 3.2.6, 6.2.5, 8.3	HW DE, SAL, SC

Certificate Expires: January 04, 2026

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# CERTIFICATE ADDENDUM

Certificate Number: 151045.000  
ADDENDUM Page Two of Eight

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**TL 9000 – H, S, V R6.3/R5.7**  
**(Based on and including ISO 9001:2015)**

<u>Site Address</u>	<u>Certification</u>	<u>Product Category</u>	<u>Site Activities</u>
ARRIS STB de Mexico, SA de C.V. Via de la Innovacion # 402; CP 66628 Parque de Investigacion e Innovacion Tecnologica Apodaca Nuevo León; Mexico	TL9000HSV	3.2.5, 3.2.6, 6.2.5	HW & SW DE, REP
ARRIS Group de Mexico S.A. de C.V. Av. La Paz 11721 Parque Industrial Pacifico Tijuana, BC 22643 Mexico	TL9000HV	3.1.1.3.4, 3.2.6, 3.2.5	MFG SC, REP
CommScope Technologies LLC 2601 Telecom Parkway Richardson, TX 75082 United States	TL9000H	3.1.1.3.4, 3.1.2.1	HW DE, SER
CommScope Telecommunications (China) Co. Ltd. No. 68 Su Hong XI Lu Suzhou Industrial Park, Suzhou Jiangsu 215021 Peoples Republic of China	TL9000H	3.1.1.1.1, 3.1.1.1.2, 3.1.1.3.4, 8.3	HW DE, MFG, SC,
CommScope Connectivity (Suzhou) Co. Ltd. 77 Qiming Road, Suzhou Industrial Park Suzhou, Jiangsu 215121 Peoples Republic of China	TL9000H	3.1.1.3.2, 3.1.1.2.2, 3.1.1.1.2, 3.2.1.1, 8.3	MFG, SC

Certificate Expires: January 04, 2026  
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# CERTIFICATE ADDENDUM

Certificate Number: 151045.000  
ADDENDUM Page Three of Eight

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**TL 9000 – H, S, V R6.3/R5.7**  
**(Based on and including ISO 9001:2015)**

<u>Site Address</u>	<u>Certification</u>	<u>Product Category</u>	<u>Site Activities</u>
Andrew Wireless Systems GmbH Industriering 10 Buchdorf Bavaria 86675 GERMANY	TL9000HV	3.1.1.3.4	HW DE, REP, MFG
CommScope India Private Ltd Plot No. N-2, Verna Industrial Estate Phase IV, Verna - Salcette, GOA 403 722 INDIA	TL9000H	3.1.1.1.1, 3.1.1.1.2, 3.1.1.3.4, 8.3	HW DE, MFG, SC
CommScope Italy srl Via Mengolina 20, Faenza Ravenna 48018 Italy	TL9000H	3.1.1.3.4	HW DE
Andrew Telecommunications de Reynosa, S. De R.L. de C. V. Ave. Industrial Reynosa Lote 2 al 5, Col Parque Industrial Reynosa, Reynosa Tamaulipas 88780 Mexico	TL9000H	3.1.1.3.4, 3.1.1.1.2, 3.1.2.1, 8.3	MFG
CommScope Corporation Mexico, S.A. de C.V. CCS Ave. Antonio J. Bermudez #550 Parque Ind. A. J. Bermudez Ciudad Juarez CHIH 32470 Mexico	TL9000H	3.1.1.3.2, 3.1.1.2.2, 3.1.2.3, 3.2.1.1, 8.3	HW DE, MFG
CommScope Corporation Mexico, S.A. de C.V. Santiago Troncoso No. 331, Cd. Juarez CHIH 32599 Mexico	TL9000H	3.1.1.3.2, 3.1.1.2.2, 3.1.2.3, 3.2.1.1, 8.3	MFG
ADC de Delicias S. De R.L. de C.V Boulevard Fernando Baeza #1301 Fraccionamiento San Marcos Ciudad Delicias Mexico	TL9000H	3.1.1.3.2, 3.1.1.2.2, 3.1.2.3, 3.2.1.1, 8.3	MFG

Certificate Expires: January 04, 2026  
Certificate Issued: January 05, 2023  
Certified Since: August 08, 1994



Dr. Cem O. Onus  
Managing Director

DEKRA Certification, Inc.  
1945 The Exchange SE #300  
Atlanta, GA 30339 USA  
(215) 997-4519  
[dekra-certification.us](http://dekra-certification.us)





# CERTIFICATE ADDENDUM

Certificate Number: 151045.000  
ADDENDUM Page Four of Eight

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**TL 9000 – H, S, V R6.3/R5.7**  
**(Based on and including ISO 9001:2015)**

<u>Site Address</u>	<u>Certification</u>	<u>Product Category</u>	<u>Site Activities</u>
CommScope Technologies UK Ltd Lomond House, Grantsmuir John Smith Business Park Kirkcaldy, Fife KY2 6NA Scotland	TL9000H	8.1.4	HW DE, SAL
CommScope Inc of North Carolina 1130 Classic Rd Apex, NC 27539 United States	TL9000H	3.1.1.2.2	HW DE, SAL
CommScope Technologies LLC 11312 S. Pipeline Road Euless, TX 76040 United States	TL9000H	8.1.4	HW DE, MFG, SAL
CommScope Connectivity LLC 501 Shenandoah Drive Shakopee MN 55379 United States	TL9000HSV	3.1.2.3 3.1.1.2.2, 3.1.1.3.2, 3.2.1.1, 8.3	HW DE, SAL, SER, SC,
CommScope Inc of North Carolina 6519 CommScope Road, Catawba, NC 28609-0199 United States	TL9000H	3.1.1.1.1, 3.1.1.1.2	HW DE, MFG, SAL
CommScope Inc of North Carolina 3642 US Hwy. 70 East Claremont NC 28610 United States	TL9000H	3.1.1.1.1, 3.1.1.2.1	HW DE, MFG, SAL

Certificate Expires: January 04, 2026  
Certificate Issued: January 05, 2023  
Certified Since: August 08, 1994



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# CERTIFICATE ADDENDUM

Certificate Number: 151045.000  
TLID: TL1786  
ADDENDUM Page Five of Eight

The Quality Management System and implementation of:

**CommScope, Inc.**

With site:

**CommScope Connectivity (Suzhou) Co. Ltd.**

77 Qiming Road, Suzhou Industrial Park

Suzhou, Jiangsu 215121

Peoples Republic of China

meets the requirements of the standard:

## TL 9000 – H R6.3/R5.7 (Based on and including ISO 9001:2015)

The validity of this certificate depends on the validity of the main certificate.

### Scope:

Manufacture metallic connectors, fiber optical jumpers and connectors, passive optical transmission sub - systems, enclosures, cable assemblies, fiber connection enclosures and communication cabinets

Product Categories	
3.1.1.1.2	Metallic Connectors
3.1.1.2.2	Optical Connector
3.1.1.3.2	Passive Optical Subsystems
3.2.1.1	Manual Cross Connect Systems
8.3	Cable Assemblies

**Certification Structure:** Multi-site

Certificate Expires: January 04, 2026  
Certificate Issued: January 05, 2023  
Certified Since: August 08, 1994



Dr. Cem O. Onus  
Managing Director

DEKRA Certification, Inc.  
1945 The Exchange SE #300  
Atlanta, GA 30339 USA  
(215) 997-4519  
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# 证书附录

证书编号: 151045.000

TLID: TL1786

附录第 6 页, 共 8 页

质量管理体系和实施:

**CommScope, Inc.**

其场所:

**康普通联通信 (苏州) 有限公司**

苏州工业园区启明路 77 号

江苏苏州 215121

中华人民共和国

符合以下标准要求:

**TL 9000 – H R6.3/R5.7**  
**(基于并包括 ISO 9001:2015)**

本证书的有效性取决于主证书的有效性。

**范围:**

金属连接器, 光纤跳线及连接器, 无源光传输子系统, 附件, 电缆组件, 光缆接头盒, 通讯机柜的生产

产品类别	
3.1.1.1.2	金属连接器
3.1.1.2.2	光学连接器
3.1.1.3.2	无源光学子系统
3.2.1.1	手动交叉连接系统
8.3	电缆组件

**认证结构: 多场所**

证书有效期: 2026.1.4

发证日期: 2023.1.5

首次发证日期: 2021.1.5



Dr. Cem O. Onus  
Managing Director

DEKRA Certification, Inc.

1945 The Exchange SE #300

Atlanta, GA 30339 USA

(215) 997-4519

[dekra-certification.us](http://dekra-certification.us)





# CERTIFICATE ADDENDUM

Certificate Number: 151045.000  
TLID: TL1786  
ADDENDUM Page Seven of Eight

The Quality Management System and implementation of:

**CommScope, Inc.**

With site:

**CommScope Telecommunications (China) Co. Ltd.**

No. 68 Su Hong Xi Lu Suzhou Industrial Park,  
Suzhou Jiangsu 215021  
Peoples Republic of China

meets the requirements of the standard:

## TL 9000 – H R6.3/R5.7 (Based on and including ISO 9001:2015)

The validity of this certificate depends on the validity of the main certificate.

### Scope:

制造金属连接器、光纤跳线和连接器、无源光传输子系统、外壳、电缆组件、光纤连接外壳和通信机柜 3.1.1.1.1, 3.1.1.1.2, 3.1.1.3.4, 8.3

Product Categories	
3.1.1.1.1	Metallic Conductor Cable
3.1.1.1.2	Metallic Connectors
3.1.1.3.4	Fixed Antenna Systems
8.3	Cable Assemblies

**Certification Structure:** Multi-site

Certificate Expires: January 04, 2026  
Certificate Issued: January 05, 2023  
Certified Since: August 08, 1994



Dr. Cem O. Onus  
Managing Director

DEKRA Certification, Inc.  
1945 The Exchange SE #300  
Atlanta, GA 30339 USA  
(215) 997-4519  
[dekra-certification.us](http://dekra-certification.us)





# 证书附录

证书编号: 151045.000

TLID: TL1786

附录第 8 页, 共 8 页质量管理体系和实施:

**CommScope, Inc.**

其场所:

**康普电信 (中国) 有限公司**

苏州工业园区苏虹西路 68 号,

江苏苏州 215021

中华人民共和国

符合以下标准要求:

## TL 9000 – H R6.3/R5.7 (基于并包括 ISO 9001:2015)

本证书的有效性取决于主证书的有效性。

### 范围:

金属连接器 · 光纤跳线及连接器 · 无源光传输子系统 · 附件 · 电缆组件 · 光缆接头盒 · 通讯机柜的生产

产品类别	
3.1.1.1.1	金属导体电缆
3.1.1.1.2	金属连接器
3.1.1.3.4	固定天线系统
8.3	电缆组件

### 认证结构: 多站点

证书有效期: 2026.1.4

发证日期: 2023.1.5

首次发证日期: 2021.1.5



Dr. Cem O. Onus  
Managing Director

DEKRA Certification, Inc.

1945 The Exchange SE #300

Atlanta, GA 30339 USA

(215) 997-4519

[dekra-certification.us](https://dekra-certification.us)



# Certificate of Registration

## ENVIRONMENTAL MANAGEMENT SYSTEM - ISO 14001:2015

This is to certify that:

CommScope, Inc. of North Carolina  
1100 CommScope Place SE  
Hickory  
North Carolina  
28603-0339  
USA


Holds Certificate No:

**EMS 648387**

and operates an Environmental Management System which complies with the requirements of ISO 14001:2015 for the following scope:

The environmental management system to control the risks associated with the manufacture, distribution, field support and central function of telecommunication products and services.

For and on behalf of BSI:

  
Carlos Pitanga, Chief Operating Officer Assurance – Americas

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 1 of 5



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Certificate No: **EMS 648387**

Location	Registered Activities
Andrew Telecommunications de Reynosa S. de R.L. de C.V. Av. Industrial Reynosa Lte 2 al 5 Parque Industrial Center Reynosa Tamaulipas 88780 Mexico	Manufacture and distribution of telecommunication products including antenna and cable.
CommScope Asia (Suzhou) Technologies Co., Ltd. EPZ II, 77 Qiming Road Suzhou Industrial Park Suzhou Jiangsu 215121 China	Manufacture and distribution of telecommunication products, including cable.
Andrew Telecommunications India Pvt. Ltd. Plot No. N-2, Phase IV Verna Industrial Estate Verna Salcette Goa 403 722 India	Manufacture and distribution of telecommunication products, including antenna and cable.
CommScope EMEA Ltd. Corke Abbey Avenue Bray County Dublin A98FY03 Ireland	Manufacture and distribution of telecommunication products, including cable and connectors.
CommScope Telecommunications (China) Co., Ltd. 68 West Su Hong Xi Lu Suzhou Industrial Park Suzhou Jiangsu 215021 China	Manufacture and distribution of telecommunication products, including antenna and cables.

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 2 of 5

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Information and Contact: BSI, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP. Tel: + 44 345 080 9000  
BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.  
A Member of the BSI Group of Companies.

Certificate No: **EMS 648387**

Location	Registered Activities
Andrew Wireless Systems GmbH Industriering 10 Buchdorf 86675 Germany	Manufacture and distribution of telecommunication products, including amplifiers and antenna systems.
CommScope, Inc. of North Carolina 1100 CommScope Place SE Hickory North Carolina 28603-0339 USA	Corporate headquarters responsible for management system oversight of all locations listed on this certificate.
CommScope Inc. 6519 CommScope Road Catawba North Carolina 28609-0199 USA	Manufacture and distribution of telecommunication products, including cable.
CommScope Inc. 3642 US Hwy 70 East Claremont North Carolina 28610-0879 USA	Manufacture and distribution of telecommunication products, including cable.
CommScope Czech Republic s.r.o. Turanka 98B Brno 62700 Czech Republic	Manufacture and distribution of telecommunication products, including connectors and terminations.
CommScope Inc. of North Carolina 1100 CommScope Place SE Hickory North Carolina 28603-0339 USA	Customer care, facility maintenance, and administrative functions.
ADC de Delicias, S. de R.L. de C.V. Blvd. Fernando Baeza No. 1301 Sur Delicias Chihuahua 33000 Mexico	Manufacturing and distribution of telecommunication products.

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 3 of 5

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BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.

A Member of the BSI Group of Companies.

Certificate No: **EMS 648387**

Location	Registered Activities
ADC de Juarez S. de R.L. de C.V. Parque Industrial Antonio J Bermudez Ciudad Juarez Chihuahua 32470 Mexico	Manufacturing and distribution of telecommunication products.
CommScope Connectivity Belgium bvba Diestsesteenweg 692 Kessel-lo 3010 Belgium	Manufacture and distribution of telecommunication products.
CommScope Technologies de Juarez S. de R.L. de C.V. Santiago Troncoso 331 Praderas del Sur, Ciudad Juarez Chihuahua 32575 Mexico	Manufacture of Fiber Optic Splice Closures (FOSC), Fiber Guide Systems (FGS), Hardened Connectivity and Molding-Gel Filling, including: plastic injection molding, plastic extrusion, plastic and metal machining, and assembly operations.
CommScope Connectivity UK Limited Unit 1 Kinmel Park Bodelwyddan Rhyl, Denbighshire LL18 5TZ United Kingdom	Fibre optic cable manufacturing, termination and design of other telecommunication products and services.
CommScope 11312 S. Pipeline Road Eules Texas 76040 USA	Manufacture, distribution, field support and central function of telecommunication products.
ARRIS GROUP DE MEXICO SA DE CV Av. De la Paz, #11721 Parque Industrial Pacifico Tijuana Baja California 22643 Mexico	Manufacture, repair, support, repair service, distribution of products and components for telecommunications that provide integrated solutions for voice, video and data through the processes of SMT, manual and mechanical assembly, soldering (manual, selective, printed, wave) electrical testing and packaging.

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 4 of 5

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Information and Contact: BSI, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP. Tel: + 44 345 080 9000

BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.

A Member of the BSI Group of Companies.



Certificate No: **EMS 648387**

Location	Registered Activities
CommScope Design & Integration UK Ltd Unit 5 & 6, Eden Business Park Edenhouse Drive Old Malton Malton YO17 6AE United Kingdom	Manufacture and distribution of telecommunications products including cabinets.
Arris Indústria Eletrônica do Brasil Ltda. CNPJ: 09.154.836/0001-15 Avenida Torquato Tapajós, 9475 Tarumã Manaus Amazonas 69041-025 Brasil	Manufacturer and distribution of Receivers, Television signal Decoders and Modulator/Router.
CommScope Design and Integration UK Ltd. Lovell House, 412 The Quadrant Birchwood Park Warrington WA3 6FW United Kingdom	Telecommunications project management, site surveys, installations commissioning and rigging.

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 5 of 5

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Information and Contact: BSI, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP. Tel: + 44 345 080 9000  
BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.  
A Member of the BSI Group of Companies.

# Certificate of Registration

OCCUPATIONAL HEALTH & SAFETY MANAGEMENT SYSTEM - ISO 45001:2018

This is to certify that:

CommScope, Inc. of North Carolina  
1100 CommScope Place SE  
Hickory  
North Carolina  
28603-0339  
USA


Holds Certificate No:

**OHS 650243**

and operates an Occupational Health and Safety Management System which complies with the requirements of ISO 45001:2018 for the following scope:

The occupational health & safety management system to control the hazards associated with the manufacture, distribution, field support and central function of telecommunication products and services.

For and on behalf of BSI:

  
Carlos Pitanga, Chief Operating Officer Assurance – Americas

Original Registration Date: 2016-04-04

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 1 of 5



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Certificate No: **OHS 650243**

Location	Registered Activities
Andrew Telecommunications de Reynosa S. de R.L. de C.V. Av. Industrial Reynosa Lte 2 al 5 Parque Industrial Center Reynosa Tamaulipas 88780 Mexico	Manufacture and distribution of telecommunication products, including antenna and cable.
CommScope Asia (Suzhou) Technologies Co., Ltd. EPZ II, 77 Qiming Road Suzhou Industrial Park Suzhou Jiangsu 215121 China	Manufacture and distribution of telecommunication products, including cable.
Andrew Telecommunications India Pvt. Ltd. Plot No. N-2, Phase IV Verna Industrial Estate Verna Salcette Goa 403 722 India	Manufacture and distribution of telecommunication products, including antenna and cable.
CommScope EMEA Ltd. Corke Abbey Avenue Bray County Dublin A98FY03 Ireland	Manufacture and distribution of telecommunication products, including cable and connectors.
CommScope Telecommunications (China) Co., Ltd. 68 West Su Hong Xi Lu Suzhou Industrial Park Suzhou Jiangsu 215021 China	Manufacture and distribution of telecommunication products, including antenna and cables.

Original Registration Date: 2016-04-04

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 2 of 5

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To be read in conjunction with the scope above or the attached appendix.

Information and Contact: BSI, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP. Tel: + 44 345 080 9000  
BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.  
A Member of the BSI Group of Companies.



Certificate No: **OHS 650243**

Location	Registered Activities
Andrew Wireless Systems GmbH Industriering 10 Buchdorf 86675 Germany	Manufacture and distribution of telecommunication products, including amplifiers and antenna systems.
CommScope, Inc. of North Carolina 1100 CommScope Place SE Hickory North Carolina 28603-0339 USA	Corporate headquarters responsible for management system oversight of all locations listed on this certificate.
CommScope Inc. 6519 CommScope Road Catawba North Carolina 28609-0199 USA	Manufacture and distribution of telecommunication products, including cable.
CommScope Inc. 3642 US Hwy 70 East Claremont North Carolina 28610-0879 USA	Manufacture and distribution of telecommunication products, including cable.
CommScope Czech Republic s.r.o. Turanka 98B Brno 62700 Czech Republic	Manufacture and distribution of telecommunication products, including connectors and terminations.
CommScope Inc. of North Carolina 1100 CommScope Place SE Hickory North Carolina 28603-0339 USA	Customer care, facility maintenance, and administrative functions.
ADC de Delicias, S. de R.L. de C.V. Blvd. Fernando Baeza No. 1301 Sur Delicias Chihuahua 33000 Mexico	Manufacturing and distribution of telecommunication products.

Original Registration Date: 2016-04-04

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 3 of 5

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Information and Contact: BSI, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP. Tel: + 44 345 080 9000

BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.

A Member of the BSI Group of Companies.

Certificate No: **OHS 650243**

Location	Registered Activities
ADC de Juarez S. de R.L. de C.V. Parque Industrial Antonio J Bermudez Ciudad Juarez Chihuahua 32470 Mexico	Manufacturing and distribution of telecommunication products.
CommScope Connectivity Belgium bvba Diestsesteenweg 692 Kessel-lo 3010 Belgium	Manufacture and distribution of telecommunication products.
CommScope Technologies de Juarez S. de R.L. de C.V. Santiago Troncoso 331 Praderas del Sur, Ciudad Juarez Chihuahua 32575 Mexico	Manufacture of Fiber Optic Splice Closures (FOSC), Fiber Guide Systems (FGS), Hardened Connectivity and Molding-Gel Filling, including: plastic injection molding, plastic extrusion, plastic and metal machining, and assembly operations.
CommScope Connectivity UK Limited Unit 1 Kinmel Park Bodelwyddan Rhyl, Denbighshire LL18 5TZ United Kingdom	Fibre optic cable manufacturing, termination and design of other telecommunication products and services.
CommScope 11312 S. Pipeline Road Eules Texas 76040 USA	Manufacture, distribution, field support and central function of telecommunication products.
ARRIS GROUP DE MEXICO SA DE CV Av. De la Paz, #11721 Parque Industrial Pacifico Tijuana Baja California 22643 Mexico	Manufacture, repair, support, repair service, distribution of products and components for telecommunications that provide integrated solutions for voice, video and data through the processes of SMT, manual and mechanical assembly, soldering (manual, selective, printed, wave) electrical testing and packaging.

Original Registration Date: 2016-04-04

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 4 of 5

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To be read in conjunction with the scope above or the attached appendix.

Information and Contact: BSI, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP. Tel: + 44 345 080 9000

BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.

A Member of the BSI Group of Companies.

Certificate No: **OHS 650243**

Location	Registered Activities
CommScope Design & Integration UK Ltd Unit 5 & 6, Eden Business Park Edenhouse Drive Old Malton Malton YO17 6AE United Kingdom	Manufacture and distribution of telecommunications products including cabinets.
Arris Indústria Eletrônica do Brasil Ltda. CNPJ: 09.154.836/0001-15 Avenida Torquato Tapajós, 9475 Tarumã Manaus Amazonas 69041-025 Brasil	Manufacturer and distribution of Receivers, Television signal Decoders and Modulator/Router.
CommScope Design and Integration UK Ltd. Lovell House, 412 The Quadrant Birchwood Park Warrington WA3 6FW United Kingdom	Telecommunications project management, site surveys, installations commissioning and rigging.

Original Registration Date: 2016-04-04

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 5 of 5

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Information and Contact: BSI, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP. Tel: + 44 345 080 9000  
BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.  
A Member of the BSI Group of Companies.



# CERTIFICATE

Certificate Number: 111045.000  
Including Five Page Addendum

The Quality System of:

**CommScope, Inc.**

With Virtual Central Function at:

1100 CommScope Place SE

Hickory, NC 28602

United States

## ISO 9001:2015

### Scope:

The sales, marketing, design, manufacture, test, repair, support, service, and distribution of telecommunications products, components, and services for the telecommunications, wireless, and broadcast networks industries

Certificate Expires: January 09, 2023  
Certificate Reissued: September 03, 2021  
Certificate Issued: January 10, 2020  
Certified Since: January 10, 2001

Business Segments	Exceptions
Home Networks	None
Broadband Networks	None
Venue and Campus Networks	ICX Products
Outdoor Wireless Networks	None



Dr. Cem O. Onus  
Managing Director  
DEKRA Certification, Inc.  
1120 Welsh Road, Suite 210  
North Wales, PA 19454 USA  
(215) 997-4519  
<http://www.dekra.us/en/audit>





# CERTIFICATE ADDENDUM

Certificate Number: 111045.000  
ADDENDUM Page One of Five

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**ISO 9001:2015**

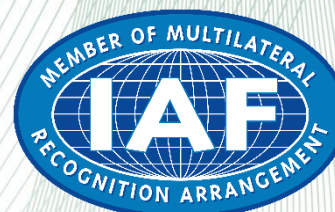
<b>Site Activities Legend:</b>	HQ = Headquarters	MFG = Manufacturing	SER = Services (Professional Services and/or Technical Support)
	HW DE= Hardware Development	REP = Repair	SC = Purchasing, Supplier Management, Manufacturing Support, Repair Support
	SW DE= Software Development	SAL = Sales, Marketing	DIST = Distribution

Site Address	Site Activities
CommScope Inc 1100 CommScope Place SE Hickory, NC 28602 United States	HQ (Virtual)
ARRIS Technology, Inc. 3871 Lakefield Drive Suwanee, GA 30024 United States	HW & SW DE, SAL, SER, SC
ARRIS Technology, Inc. 101 Tournament Dr. Horsham, PA, 19044 United States	HW & SW DE, SAL, SER, SC
ARRIS Technology, Inc. 6450 Sequence Drive San Diego, CA 92121 United States	HW & SW DE, SAL, SER, SC
ARRIS Technology, Inc. 900 Chelmsford St. Lowell, MA 01851 United States	HW & SW DE, SAL, SER, SC

Certificate Expires: January 09, 2023  
Certificate Reissued: September 03, 2021  
Certified Since: January 10, 2001



Dr. Cem O. Onus  
Managing Director  
DEKRA Certification, Inc.  
1120 Welsh Road, Suite 210  
North Wales, PA 19454 USA  
(215) 997-4519  
<http://www.dekra.us/en/audit>





# CERTIFICATE ADDENDUM

Certificate Number: 111045.000  
ADDENDUM Page Two of Five

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**ISO 9001:2015**

Site Address	Site Activities
ARRIS Solutions, Inc. 2400 Ogden Ave., Suite 180 Lisle, IL 60532 United States	HW & SW DE, SAL, SER, SC
ARRIS 15 Sterling Drive Wallingford, CT 06492 United States	HW & SW DE, SER, SC
ARRIS Technology, Inc. 2450/2500 Walsh Avenue Santa Clara, CA 95051 United States	HW & SW DE, SAL, SER
Ruckus Wireless International Inc. 350 West Java Dr. Sunnyvale, CA 94089 United States	HW & SW DE, SAL, SER, SC
CommScope Technologies LLC 2601 Telecom Parkway Richardson, TX 75082 United States	HW DE, SER
CommScope, Inc of North Carolina 6519 CommScope Road Catawba NC 28009 United States	HW DE, MFG, SAL
ARRIS Technology (Shenzhen) Co., Ltd. South & East Wing, 4F, Block 2 Vision (Shenzhen) Business Park Shenzhen P. R. China	SW DE
Ruckus Wireless Network Technology (Shenzhen) Co. Ltd. Units C&D, 5th Floor, No. 2 Finance base, 8 KeFa Road, Shenzhen, China	SW DE

Certificate Expires: January 09, 2023  
Certificate Reissued: September 03, 2021  
Certified Since: January 10, 2001



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# CERTIFICATE ADDENDUM

Certificate Number: 111045.000  
ADDENDUM Page Three of Five

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**ISO 9001:2015**

Site Address	Site Activities
Ruckus Wireless International Inc., Taiwan Branch @ Neihs District, Taipei City, Rui Road 411, 10th floor, Taipei	SW DE
ARRIS Group India Pvt Limited (AGIPL) Salarpuria Supreme, Ground Floor West Wing & First Floor Munnekolalu Village, Varthur Hobli, Outer Ring Road, Bangalore-560037	SW DE
ARRIS Group Australia Pty Ltd. Level 4, 460 Bourke Street Melbourne, Australia 3000	SAL, SER
ARRIS Group de Mexico S.A. de C.V. Av. La Paz 11721 Parque Industrial Pacifico Tijuana, BC 22643 Mexico	MFG, REP, SC
ARRIS Communications Ireland Limited Building 4300, Cork Airport Business Park Kinsale Road Cork County Ireland	HW & SW DE
ARRIS Group India Private Limited "The Senate" No:33/1, Ulsoor Road, Bangalore - 560 042 India	HW & SW DE
ARRIS Technology (Hangzhou) Company Limited Shanghai Branch 5th Floor, Building 11, No. 1257 MingYue Road, Pudong New District, Shanghai 201206, China	SW DE, SC

Certificate Expires: January 09, 2023  
Certificate Reissued: September 03, 2021  
Certified Since: January 10, 2001



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# CERTIFICATE ADDENDUM

Certificate Number: 111045.000  
ADDENDUM Page Four of Five

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**ISO 9001:2015**

Site Address	Site Activities
ARRIS International Ltd Slats Mill Victoria Road, Saltaire Shipley West Yorkshire BD 18 3LF United Kingdom	HW & SW DE, SAL, SER, SC
ARRIS Group, Inc. 50 Stranmillis Embankment Belfast, BT95FL Northern Ireland	SAL, SWDE, SER
CommScope Czech Republic, s.r.o. Turanka 856/98B 627 00 Brno Czech Republic	HW DE, MFG
CommScope CZ, spol. s.r.o. U Morusi 888, 53006 Pardubice Czech Republic Czech Republic	HW DE
CommScope Connectivity UK Limited Units 1 and 4 Kimmel Park Industrial Estate Bodelwyddan, Denbighshire, LL18 5TZ United Kingdom	HW DE, MFG, SAL
CommScope Design & Integration UK Ltd. Unit 5 Eden Business Park Eden House Drive Old Malton, Malton, North Yorkshire YO17 6AE United Kingdom	HW DE
CommScope Design & Integration UK Limited 412 The Quadrant, Birchwood Park Warrington, WA3 6FW United Kingdom	SAL

Certificate Expires: January 09, 2023  
Certificate Reissued: September 03, 2021  
Certified Since: January 10, 2001



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# CERTIFICATE ADDENDUM

Certificate Number: 111045.000  
ADDENDUM Page Five of Five

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**ISO 9001:2015**

Site Address	Site Activities
CommScope EMEA Ltd. Corke Abbey Avenue Bray, Co. Dublin Ireland	HW DE, MFG, SAL
CommScope EMEA Ltd. Diestsesteenweg 692 3010 Kessel-Lo, Belgium	HW DE, MFG, SAL
CommScope Italy Srl Via Archimede, 22/24 Agrate Brianza (MB) 20864 Italy	HW DE
Telecom Networks Americas AV. HIPOLITO YRIGROYEN 2999, DEPOSITO 6 EL TALAR, TIGRE Buenos Aires B1618AXD Argentine Republic	SAL, DIST
CommScope Networks India Private Limited Salarpuria Softzone, A Block, 1st Floor Survey No 80/1, 81/1, 81/2, B Wing, Belandur Village, Varthur Hobli, Outer Ring Bangalore – Karnataka 560103 India	SW DE
ADC India Communications Ltd. No 10 C , 2nd Phase Peenya Industrial Area Bangalore – Karnataka 560058 India	MFG, SAL

Certificate Expires: January 09, 2023  
Certificate Reissued: September 03, 2021  
Certified Since: January 10, 2001



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# CommScope Network Infrastructure System

25 Year Extended Product and Application Warranty  
("System Warranty")

# Terms and Conditions

**Extended Product Warranty.** CommScope warrants, for a period of twenty-five (25) years from the Certification Date (the “Warranty Period”), that Products in the Registered System shall be free from defects in materials or workmanship subject, to the terms and conditions below and the terms, conditions and limitations of CommScope’s Limited Product Warranty in effect at the date of sale (available at <http://www.commscope.com/Resources/Warranties/>).

**Application Warranty.** During the Warranty Period, the Registered System will meet or exceed the specifications set forth in the System Specification and support Applications as documented therein.

**System Warranty Requirements.** The System Warranty applies only to Products that are: (i) installed by an Authorized Partner, at the location listed on the System Warranty Certificate; (ii) installed in compliance with CommScope’s written design, engineering and installation procedures, and the specifications for the Application and the System Specification; (iii) designed, installed, and maintained in compliance with the applicable industry standards as set forth in the System Specification; (iv) not subject to conditions that exceed the individual Product Specification(s); (v) used at the original site of installation; (vi) tested pursuant to industry standards and applicable CommScope testing requirements and satisfactorily pass such tests; and (vii) not otherwise expressly excluded or invalidated under the System Warranty Terms and Conditions. To qualify for a System Warranty, all documents, including the prescribed System test results, must be submitted to CommScope for review within sixty (60) days of installation, and registration for the System Warranty must be applied for with CommScope within ninety (90) days from the date the installation is complete. CommScope, in its sole judgment, shall determine if the System Warranty Requirements have been met. CommScope’s approval of a System Warranty shall be evidenced by a numbered registration System Warranty Certificate issued by CommScope. In the event a System Warranty Certificate is issued and CommScope subsequently discovers that any of the System Warranty requirements were not met, then the System Warranty shall be void.

**Beneficiary and Warranty Transfer.** CommScope will only honor System Warranty claims made by the person or entity to which the System Warranty Certificate is issued. The System Warranty may, upon prior written approval from CommScope, be transferred to a successor in interest to the site where the Registered System was originally installed.

**Modifications.** Moves, repairs, alterations, additions, or changes to the Registered System (“Change(s)”) are only covered by the System Warranty if: (i) performed by an Authorized Partner; (ii) installed in compliance with CommScope’s written design, engineering and installation procedures, and the specifications for the Application and the System Specification, and (iii) designed, installed, and maintained in compliance with the applicable industry standards as set forth in the System Specification. Day-to-day administration and maintenance of the Registered System by the End-Customer will not void the System Warranty if performed in compliance with applicable CommScope system design and installation guidelines using CommScope approved products. All test results shall be sent for approval to CommScope along with a detailed description of the Change(s) and bill of materials within thirty (30) days of installation. If the Change(s) are approved, CommScope shall update the System Warranty registration to indicate the Change(s). Failure to comply with the foregoing relating to Change(s) shall void the System Warranty.

**Exclusions from Warranty and Limitations on Liability.** The “Exclusions from Warranty” and “Limitations on Liability” in the Limited Product Warranty shall apply to the System Warranty. The occurrence of an Exclusion from Warranty in the Limited Product Warranty shall void the System Warranty. The System Warranty shall also be void if any Product in the Registered System has been (i) removed from the original site of installation, (ii) altered, repaired or disassembled by a non-Authorized Partner, or (iii) exposed to, or has outside materials applied to it, including but not limited to paint, water, chemicals, solutions, cleaning supplies and lubricants (“Contamination”). End-Customer must notify an Authorized Partner or CommScope within 24 hours of any Contamination.

Outside Plant Cable is excluded from and will void the System Warranty when installed above ground and exposed to the outside environment, including but not limited to, an aerial installation. Outside Plant Cable installed underground, either by direct burial or in conduit, is not excluded from the System Warranty.

Failure of the End-Customer to submit any System Warranty claim to the authorized CommScope office as designated by CommScope within thirty (30) days following expiration of the System Warranty shall be an admission by the End-Customer and conclusive proof that the Registered System and Product(s) are in every respect as warranted and shall release CommScope and the Authorized Partner from any and all claims for damage or loss sustained by the End-Customer.

Any violation or non-compliance with the System Warranty Terms and Conditions will void the System Warranty.

**Remedies.** If during the Warranty Period, the End-Customer experiences problems with a Registered System or a Product in a Registered System ("Problem") and suspects there is a potential warranty claim hereunder, the End-Customer must first reasonably investigate potential causes of the suspected Problem that are not CommScope related and reasonably determine that none of these potential causes were responsible for the Problem. Once the End-Customer reasonably believes that all non-CommScope causes for the Problem are ruled out, but in no event more than thirty (30) days after the End-Customer knew or should have known of the Problem, the End-Customer must contact the Authorized Partner that installed the Registered System to report the Problem. If the Authorized Partner is unable to resolve the Problem, then the Authorized Partner will contact CommScope and make a claim under the System Warranty for further investigation and resolution.

If CommScope determines that a Problem is due to a breach of the System Warranty, CommScope will repair or replace Product as CommScope deems necessary to correct the Problem, including the provision of reasonable labor and removal and reinstallation of such Product at CommScope's discretion. CommScope shall only be responsible for costs that have received the prior written authorization of CommScope. If CommScope chooses to repair Product, CommScope may use new or reconditioned replacement parts. If CommScope chooses to replace Product, CommScope may replace with new or reconditioned products of the same or similar design. Any repair or replacement will be warranted for either (a) 90 days or (b) the remainder of the original Warranty Period, whichever is longer. If the Problem is found by CommScope or an Authorized Partner not to be related to a Product or any warranty exclusions, then End-Customer will be responsible for any costs incurred related to the Problem claim.

**Choice of Law.** The System Warranty shall be governed by and construed in accordance with the laws of the State of North Carolina, U.S.A. The United Nations Convention on Contracts for the International Sale of Goods shall not apply. The End-Customer acknowledges that as a condition to receiving the System Warranty, End-Customer unconditionally submits to the jurisdiction of the North Carolina state and federal courts. If any portion of the System Warranty is not enforceable due to local legal requirements, then such specific language shall be modified to meet local legal requirements consistent with CommScope's intent.



# Definitions

The following definitions shall apply to the System Warranty:

**CommScope** shall mean CommScope Technologies LLC.

**Application** shall mean a standardized set of network technologies, protocols, and hardware for enabling communication over the prescribed System as documented by CommScope.

**Authorized Partner** shall mean a party that is certified by CommScope as a CommScope installation partner and that is in good standing with CommScope at the time of installation.

**Authorized Reseller** shall mean a party that is authorized in writing by CommScope to sell Products and that is in good standing with CommScope at the time of sale.

**Certification Date** shall mean the earlier of the registration date on the face of the System Warranty Certificate or the Original Installation Completion Date.

**End-Customer** shall mean the end-user who has the Products installed at its premises by an Authorized Partner.

**Original Installation Completion Date** shall mean the date that the Authorized Partner completed the installation and testing of the Registered System at the End-Customer's site being submitted for System Warranty eligibility.

**Outside Plant Cable** shall mean all cabling located between demarcation points in buildings, switching and data centers and the demarcation point in another such facility.

**Passive** shall mean signal-carrying components that exhibit no gain or contribute no energy.

**Product(s)** shall mean Passive products manufactured by CommScope that are contained in the bill of materials, for an end-to-end SYSTIMAX®, UNIPRISE®, or NETCONNECT® system, which were filed with the registration for the System Warranty and which were purchased from an Authorized Reseller.

**Product Specification** shall mean CommScope's published specification(s), in effect at the time of sale, which defines the optical and/or electrical capabilities of the individual Products.

**Registered System** shall mean the System designated on the System Warranty Certificate.

**System** refers to the end-to-end SYSTIMAX®, UNIPRISE®, or NETCONNECT® system, comprised entirely of Products approved by CommScope for the respective System and that meet all of the conditions in the "System Warranty Requirements" Section of these System Warranty Terms and Conditions.

**System Specification** shall mean CommScope's published specification(s) in effect at the time of sale, which describes the optical and/or electrical capabilities of the System as a whole.

**System Warranty** shall mean the Extended Product and Application Warranty.

**System Warranty Certificate** shall mean the certificate issued by CommScope evidencing CommScope's approval and issuance of a System Warranty and identifying the covered System.

**Precedence.** In the event of any conflict between the terms of the System Warranty and CommScope's Limited Product Warranty and/or a System Specification, the terms of the System Warranty shall control.



commscope.com

Visit our website or contact your local CommScope representative for more information.

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Unless otherwise noted, all trademarks identified by ® or ™ are registered trademarks, respectively, of CommScope, Inc. This document is for planning purposes only and is not intended to modify or supplement any specifications or warranties relating to CommScope products or services. CommScope is committed to the highest standards of business integrity and environmental sustainability with a number of CommScope's facilities across the globe certified in accordance with international standards, including ISO 9001, TL 9000, and ISO 14001. Further information regarding CommScope's commitment can be found at [www.commscope.com/About-Us/Corporate-Responsibility-and-Sustainability](http://www.commscope.com/About-Us/Corporate-Responsibility-and-Sustainability).

BR-1110431-EN (06/18)

1. **Definitions.** For purposes of this Warranty, (i) “Buyer” shall mean the individual or entity identified on the applicable purchase order or supply agreement (or, if different, on Seller’s quotation, order acknowledgement or confirmation), (ii) “Seller” shall mean the CommScope entity identified on such entity’s quotation, order acknowledgement, confirmation or supply agreement, (iii) “Product” shall mean a product manufactured by Seller pursuant to the applicable supply agreement, quotation, order acknowledgement or confirmation, and (iv) “Warranty Period” shall mean one year from date of original shipment from Seller’s facility unless a different time period is set forth in **Exhibit A**.
2. **Limited Warranty.** Seller warrants that, as of the date of delivery, Seller has good title to the Product, free from any lawful security interest or other lien or encumbrance unknown to Buyer. In addition, during the Warranty Period, the Product will be free from defects in materials or workmanship arising under proper and normal use. This Warranty shall apply only to the Products and shall not apply to any other goods or materials, parts or components of a system or any system as a whole. This Warranty does not cover ordinary wear and tear. Seller does not warrant any products manufactured by third parties; provided that Seller will, to the extent permitted by the manufacturer, assign third-party warranties to Buyer.
3. **Inspection.** If Buyer claims that a Product is defective in materials or workmanship, Seller shall have the right to either examine the Product where it is located or, in its sole discretion, issue shipping instructions for return of the Product. Seller’s inspection in response to a warranty claim shall not constitute acceptance or acknowledgment of the claim’s validity. Buyer shall prepay all transportation charges for such return.
4. **Remedies.** Seller’s sole and exclusive obligation and Buyer’s exclusive remedy under this Warranty is Seller’s repair or replacement of the defective Product or a credit for the purchase price of the defective Product. Seller shall have sole discretion as to which of these remedies Seller will provide. Seller is not liable for any repair or maintenance costs incurred by Buyer, unless Seller authorizes such charges in writing in advance of the commencement of the work. If Seller elects to replace or repair the defective Product, the replaced or repaired Product will be warranted for the remainder of the Warranty Period applicable to the originally shipped Product, but the Warranty shall not be extended beyond the original Warranty Period.
5. **Notice and Waiver.** If Buyer discovers any defect in the Product, Buyer must provide prompt (and in no case later than thirty (30) days after discovery) written notice to Seller of the claimed defect. Such notice shall describe, in reasonable detail, the symptoms of such defect. The notice must be received by Seller during the Warranty Period for such Product. Failure to give timely notice of a claim shall result in Buyer’s waiver of such claim.
6. **Transfer of Ownership.** This Warranty is not transferable unless Buyer is expressly authorized by Seller in writing to resell the Product. In addition, Buyer must notify Seller on or before the fifteenth (15<sup>th</sup>) day after the date on which it transfers ownership of the warranted Product. Any transfers in violation of this Section shall invalidate this Warranty. Notice of the transfer of ownership must be in writing and shall include the name and address of the new owner.
7. **Exclusions from Warranty.** This Warranty shall not apply to problems attributable to, or as a result of:
  - (a) improper installation or misapplication of parts;
  - (b) chain or system failures induced by other products or components;
  - (c) lack of proper inspection or maintenance or failure to provide a suitable operating environment;
  - (d) any consumables provided with the Product and any other materials, components or products manufactured by a third party;
  - (e) power surges, fire, unusual mechanical, physical or electrical stress, severe weather conditions or acts of nature, including but not limited to, lightning or floods;
  - (f) usage or operation not in accordance with published ratings, specifications or instructions, including but not limited to environmental specifications identified by Seller;
  - (g) any adjustment, modification, alteration, removal or repair of any part of the Product not expressly authorized by Seller in writing;
  - (h) accidental damage, misuse, abuse, neglect or unauthorized access of the Product or of any system of which the warranted Product is a part;
  - (i) any type of aesthetic changes due to oxidation or corrosion occurring on stainless steel or galvanized steel parts installed in unusually corrosive marine and industrial atmospheres (in which case Seller’s only obligation shall be to ensure that Product complies with Seller’s published material specifications);
  - (j) use of the Product for purposes other than that for which it was designed; or
  - (k) mishandling during shipment of the Product.

This Warranty is for Products installed and used in accordance with Seller’s design, installation and operating parameters. Buyer’s failure to ensure conformity with such parameters will void all warranties. Under no circumstance shall Seller have any liability or obligation with respect to expenses, liabilities or losses associated with the installation or removal of any Product or the installation or removal of any components for inspection, testing or redesign occasioned by any defect or by any repair or replacement of a Product.

8. **Limitation on Liability.** THE WARRANTIES SET FORTH IN SECTION 2 HEREOF ARE EXCLUSIVE AND ARE MADE ONLY TO BUYER. SELLER MAKES NO OTHER REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, AND SPECIFICALLY DISCLAIMS AND EXCLUDES ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY, NONINFRINGEMENT OR FITNESS FOR A PARTICULAR PURPOSE AND ANY REPRESENTATION OR WARRANTY ARISING BY USAGE OF TRADE, COURSE OF DEALING OR COURSE OR PERFORMANCE. No person is authorized to give any additional warranties on Seller’s behalf or to assume for Seller any other liability, except in a writing signed by an authorized officer of Seller. SELLER’S TOTAL LIABILITY FOR ANY CLAIM OR DAMAGE ARISING OUT OF OR IN CONNECTION WITH THE MANUFACTURE, SALE, DELIVERY OR USE OF THE PRODUCTS WILL BE LIMITED TO PROVEN DIRECT DAMAGES, NOT TO EXCEED THE PURCHASE PRICE OF SUCH PRODUCTS. IN NO EVENT WILL SELLER BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL OR PUNITIVE DAMAGES, INCLUDING, WITHOUT LIMITATION, ANY CLAIM FOR LOSS OF ACTUAL OR ANTICIPATED REVENUES OR PROFITS. These limitations on liability will apply regardless of the form of action, whether in contract, tort, strict liability or otherwise, and whether damages were foreseeable and will survive failure of any exclusive remedies provided in Section 4 hereof.

9. **Choice of Law.** The terms and conditions contained herein and the rights of the parties to any transaction to which they relate shall be governed by and construed in accordance with the laws of the State of North Carolina, U.S.A. The United Nations Convention on Contracts for the International Sale of Goods shall not apply.

## LIMITED PRODUCT WARRANTY

### Exhibit A

Seller warrants that the Products identified below will be free from defects in material and workmanship arising under proper and normal use for the following Warranty Period:

<b>QR® Coaxial Cable</b>	Ten (10) years from the date of original shipment.
<b>ValuSite® Products</b>	Three (3) years from the date of original shipment.
<b>I-Line Accessory Products</b>	Three (3) years from the date of original shipment.
<b>Standard RADIAX® Cable, Connector, Accessory and Cable Assembly* Products</b>	Five (5) years from the date of original shipment, except for the following: (i) two (2) years for surge arrestors; and (ii) one (1) year for all other accessories.
<b>Standard CNT® Cable, Connector, Accessory and Cable Assembly† Products</b>	Five (5) years from the date of original shipment; except that the Warranty Period for Products purchased for resale purposes shall be one (1) year.
<b>Broadband RF Connectivity Products</b>	Five (5) years from the date of original shipment.
<b>Other OSP Cable Products (P3®, Drop Coax, Fiber Cable, Fiber Drop Cable, CIC)</b>	One (1) year from the date of original shipment
<b>FDH Products</b>	One (1) year from the date of original shipment
<b>Multiservice terminals (MST), Open Terminals (OTE) and Hardened Drop Cable Assemblies</b>	One (1) year from the date of original shipment
<b>OSP “Box” Products</b>	One (1) year from the date of original shipment
<b>Mini-RDTs and RDTs</b>	One (1) year from the date of original shipment
<b>FOSC™, FIST™ and Tenio™</b>	One (1) year from the date of original shipment
<b>OSP Copper Connect and Closure Products</b>	One (1) year from the date of original shipment
<b>Standard HELIAX® Cable, Connector, Accessory and Cable Assembly‡ Products</b>	Ten (10) years from the date of original shipment; except for the following: (i) three (3) years for ValuFlex® cable assemblies; (ii) three (3) years for weatherproofing kits; (iii) one (1) year for cable preparation tools (excluding blades); (iv) one year for single click-on hanger kits; and (v) two (2) years for surge arrestors.
<b>HELIAX® FiberFeed® Products, including FiberFeed® hybrid and fiber cables and assemblies, power cables and junction boxes</b>	One (1) year from the date of original shipment.
<b>Steel Products and Rapid Deployment Monopoles</b>	Three (3) years from the date of original shipment.
<b>Standard ION-B®, ION-E®, ION-M®, ION-U®, MR, p-POI®, i-POI®, e-POI™, and Node Repeater Products</b>	The earlier of: (i) one (1) year from the date of installation; or (ii) fifteen (15) months from the date of shipment.
<b>Premium Passive Products, including In-Building Directional Couplers, Hybrid Matrices, Tappers, Power Splitters, Terminations, Attenuators and CMAX Antenna Products</b>	Five (5) years from the date of original shipment.
<b>ValuDAS® Passive Products, including Air Directional Couplers, Hybrid Couplers, High Power Splitters, and Cell-Max™ Antennas</b>	Two (2) years from the date of original shipment.
<b>InterReach Fusion®</b>	One (1) year from the date of original shipment.
<b>InterReach Unison®</b>	One (1) year from the date of original shipment.
<b>FlexWave® Spectrum</b>	One (1) year from the date of original shipment.
<b>FlexWave® Prism</b>	One (1) year from the date of original shipment.
<b>FlexWave® Active Integration Panel (AIP)</b>	One (1) year from the date of original shipment.
<b>A.I.M.O.S. Software Products</b>	One (1) year from the date of original shipment.

\* RADIAX® Cable Assembly Product means any RADIAX® coaxial cable that has been fitted with Seller’s connectors in accordance with the installation instructions.

† CNT® Cable Assembly Product means any CNT® coaxial cable that has been fitted with Seller’s connectors by Seller or its certified distributor.

‡ HELIAX® Cable Assembly Product means any HELIAX® coaxial cable or elliptical waveguide that has been fitted with Seller’s connectors by Seller or its certified distributor.



## LIMITED PRODUCT WARRANTY

<b>In- Building and Fixed Subscriber Antennas</b>	The earlier of: (i) three (3) years from the date of installation or (ii) thirty-nine (39) months from the date of original shipment.
<b>OneCell® and S1000 Small Cell Platforms (excluding software)</b>	The earlier of: (i) one (1) year from the date of installation; or (ii) fifteen (15) months from the date of original shipment
<b>Small Cell Device Management System (DMS) Software for OneCell® and S1000 Small Cell Platforms</b>	Ninety (90) days from the date of original shipment
<b>Base Station Antenna Products</b>	Two (2) years from the date of original shipment for all base station antennas except base station antennas incorporating N-type connectors, which shall have a warranty of one (1) year from the date of original shipment.
<b>Standard Tower Mounted Amplifier, Bias Tee and Power Distribution Unit Products</b>	Two (2) years from the date of original shipment.
<b>Standard Filter, Diplexer and Triplexer Products</b>	Two (2) years from the date of original shipment.
<b>DryLine® Dehydrator Systems and Line Monitoring Systems</b>	Three (3) years from the date of original shipment or 3,000 hours of actual run time, whichever occurs first; except the Warranty Period for the compressor is only one (1) year from original shipment or 1,000 hours of actual run time, whichever occurs first. This Warranty Period does not apply to Factory Reconditioned Dehydrators, which are warranted for only one (1) year from the date of original shipment.
<b>Microwave Antennas</b>	Three (3) years from the date of original shipment.
<b>Terrestrial Microwave System Products (including Microwave System Flex-Twist, Coupler, Filter and Diplexer Products)</b>	Three (3) years from the date of original shipment.
<b>SiteRise™ Solutions</b>	One (1) year from the date of original shipment on workmanship for the Solution.
<b>Copper Structured Cabling Products</b>	One (1) year from the date of Installation
<b>Fiber Optic Panels, including Accessories, Mounting Hardware, Modules</b>	One (1) year from the date of shipment
<b>Fiber Optic Field Terminated Connectors, Kits, Tools, Consumables, Accessories</b>	One (1) year from the date of shipment
<b>Indoor Fiber Cable Patch Cords, Cable Assemblies, Fiber Trunks</b>	One (1) year from the date of shipment
<b>Passive Optical Components and Value Added Modules (VAMs)</b>	One (1) year from the date of shipment
<b>Fiber Guide Fiber Management System (FGS)</b>	One (1) year from the date of shipment
<b>Optical Distribution Frames, including Modules, Blocks, Accessories and Hardware</b>	One (1) year from the date of shipment
<b>Other Enterprise Products (Coax, Automotive Cables, Enterprise Enclosures and miscellaneous items) (excluding software)</b>	One (1) year from the date of installation.
<b>Cabinets Cable and Apparatus Products</b>	One (1) year from the date of original shipment.
<b>Electronic Enclosure Products (Cabinets)</b>	Two (2) years from the date of original shipment.
<b>Alifabs™ Cabinets &amp; Ancillary Products</b>	One (1) year from the date of original shipment.
<b>Alifabs™ Free Cooling Products and Accessories and Spare Parts, including Monitor</b>	Two (2) years from the date of original shipment.
<b>Alifabs™ Telecommunications Towers and Accessories</b>	One (1) year from the date of original shipment.
<b>Alifabs™ Services (power upgrades, enablements, installation and decommission work, rigging, and fault management)</b>	One (1) year from the date of completion of the work.
<b>Any other Software Products</b>	Ninety (90) days from the date of original shipment.

# CERTIFICATE

Certificate Number: 111045.000  
Including Seven Page Addendum

The Quality Management System and implementation of:

## CommScope, Inc.

With Virtual Central Function at:  
1100 CommScope Place SE  
Hickory, NC 28602  
United States

meets the requirements of the standard:

## ISO 9001:2015

### Scope:

The sales, marketing, design, manufacture, test, repair, support, service, and distribution of telecommunications products, components, and services for the telecommunications, wireless, and broadcast networks industries

Certificate Expires: January 04, 2026  
Certificate Issued: January 05, 2023  
Certified Since: January 10, 2001

Business Segments	Exceptions
Connectivity and Cable Solutions (CCS)	None
Networking, Intelligent Cellular & Security Solutions (NICS)	None
Outdoor Wireless Networks (OWN)	None
Access Network Solutions (ANS)	None



Dr. Cem O. Onus  
Managing Director

DEKRA Certification, Inc.  
1945 The Exchange SE #300  
Atlanta, GA 30339 USA  
(215) 997-4519  
<https://www.dekra.us/en/audits/>





# CERTIFICATE ADDENDUM

Certificate Number: 111045.000  
ADDENDUM Page One of Seven

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**ISO 9001:2015**

<b>Site Activities Legend:</b>	HQ = Headquarters	MFG = Manufacturing	SER = Services (Professional Services and/or Technical Support)
	HW DE= Hardware Development	REP = Repair	SC = Purchasing, Supplier Management, Manufacturing Support, Repair Support
	SW DE= Software Development	SAL = Sales, Marketing	DIST = Distribution

<b>Site Address</b>	<b>Site Activities</b>
CommScope Inc 1100 CommScope Place SE Hickory, NC 28602 United States	HQ (Virtual)
ARRIS Technology, Inc. 3871 Lakefield Drive Suwanee, GA 30024 United States	HW & SW DE, SAL, SER, SC
ARRIS Technology, Inc. 101 Tournament Dr. Horsham, PA, 19044 United States	HW & SW DE, SAL, SER, SC
ARRIS Technology, Inc. 6450 Sequence Drive San Diego, CA 92121 United States	SW DE, SER
ARRIS Technology, Inc. 900 Chelmsford St. Lowell, MA 01851 United States	HW & SW DE, SER, SC

Certificate Expires: January 04, 2026  
Certificate Issued: January 05, 2023  
Certified Since: January 10, 2001



Dr. Cem O. Onus  
Managing Director

DEKRA Certification, Inc.  
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# CERTIFICATE ADDENDUM

Certificate Number: 111045.000  
ADDENDUM Page Two of Seven

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**ISO 9001:2015**

Site Address	Site Activities
ARRIS Solutions, Inc. 2400 Ogden Ave., Suite 180 Lisle, IL 60532 United States	HW & SW DE, SAL, SER, SC
ARRIS 15 Sterling Drive Wallingford, CT 06492 United States	HW & SW DE, SER, SC
ARRIS Technology, Inc. 2450/2500 Walsh Avenue Santa Clara, CA 95051 United States	HW & SW DE, SAL, SER
Ruckus Wireless International Inc. 350 West Java Dr. Sunnyvale, CA 94089 United States	HW & SW DE, SER
Ruckus Wireless Network Technology (Shenzhen) Co. Ltd. Units C&D, 5th Floor, No. 2 Finance base, 8 KeFa Road, Shenzhen, China	SW DE, SC, HW DE

Certificate Expires: January 04, 2026  
Certificate Issued: January 05, 2023  
Certified Since: January 10, 2001



Dr. Cem O. Onus  
Managing Director

DEKRA Certification, Inc.  
1945 The Exchange SE #300  
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# CERTIFICATE ADDENDUM

Certificate Number: 111045.000  
ADDENDUM Page Three of Seven

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**ISO 9001:2015**

Site Address	Site Activities
<b>Site Address</b>	<b>Site Activities</b>
CommScope Asia (Suzhou) Technologies Co., Ltd. 77 Qiming Road, Suzhou Industrial Park Suzhou, Jiangsu 215121 Peoples Republic of China	MFG, SC
Ruckus Wireless International Inc., Taiwan Branch @ Neihs District, Taipei City, Rui Road 411, 10th floor, Taipei	SW DE
ARRIS Group India Pvt Limited (AGIPL) Salarpuria Supreme, Ground Floor West Wing & First Floor Munnekolalu Village, Varthur Hobli, Outer Ring Road, Bangalore-560037	SW DE
ARRIS Group de Mexico S.A. de C.V. Av. La Paz 11721 Parque Industrial Pacifico Tijuana, BC 22643 Mexico	MFG, REP, SC
ARRIS Communications Ireland Limited Building 4300, Cork Airport Business Park Kinsale Road Cork County Ireland	HW & SW DE
ARRIS Group India Private Limited "The Senate" No:33/1, Ulsoor Road, Bangalore - 560 042 India	HW & SW DE

Certificate Expires: January 04, 2026  
Certificate Issued: January 05, 2023  
Certified Since: January 10, 2001



Dr. Cem O. Onus  
Managing Director

DEKRA Certification, Inc.  
1945 The Exchange SE #300  
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# CERTIFICATE ADDENDUM

Certificate Number: 111045.000  
ADDENDUM Page Four of Seven

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**ISO 9001:2015**

Site Address	Site Activities
ARRIS Group, Inc. 50 Stranmillis Embankment Belfast, BT95FL Northern Ireland	SW DE
CommScope Czech Republic, s.r.o. Turanka 856/98B 627 00 Brno Czech Republic	HW DE,
CommScope CZ, spol. s.r.o. U Morusi 888, 53006 Pardubice Czech Republic Czech Republic	HW DE,
CommScope Connectivity UK Limited Units 1 and 4 Kinmel Park Industrial Estate Bodelwyddan, Denbighshire, LL18 5TZ United Kingdom	HW DE, MFG, SAL
CommScope Design & Integration UK Ltd. Unit 5 & 6 Eden Business Park Eden House Drive Old Malton, Malton, North Yorkshire YO17 6AE United Kingdom	HW DE, MFG, SC

Certificate Expires: January 04, 2026  
Certificate Issued: January 05, 2023  
Certified Since: January 10, 2001



Dr. Cem O. Onus  
Managing Director

DEKRA Certification, Inc.  
1945 The Exchange SE #300  
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# CERTIFICATE ADDENDUM

Certificate Number: 111045.000  
ADDENDUM Page Five of Seven

The Quality Management System and implementation of:

**CommScope, Inc.**

meets the requirements of the standard:

**ISO 9001:2015**

Site Address	Site Activities
CommScope Design & Integration UK Limited 412 The Quadrant, Birchwood Park Warrington, WA3 6FW United Kingdom	SER
CommScope EMEA Ltd. Corke Abbey Avenue Bray, Co. Dublin Ireland	MFG, SAL
CommScope EMEA Ltd. Diestsesteenweg 692 3010 Kessel-Lo, Belgium	HW DE, MFG, SAL
CommScope Italy Srl Via Archimede, 22/24 Agrate Brianza (MB) 20864 Italy	HW DE, REP, SW DE
Telecom Networks Americas AV. HIPOLITO YRIGROYEN 2999, DEPOSITO 6 EL TALAR, TIGRE Buenos Aires B1618AXD Argentine Republic	SAL, DIST
CommScope Networks India Private Limited Salarpuria Softzone, A Block, 1st Floor Survey No 80/1, 81/1, 81/2, B Wing, Belandur Village, Varthur Hobli, Outer Ring Bangalore – Karnataka 560103 India	SW DE
ADC India Communications Ltd. No 10 C , 2nd Phase Peenya Industrial Area Bangalore – Karnataka 560058 India	MFG, SC

Certificate Expires: January 04, 2026  
Certificate Issued: January 05, 2023  
Certified Since: January 10, 2001



**Dr. Cem O. Onus**  
Managing Director

DEKRA Certification, Inc.  
1945 The Exchange SE #300  
Atlanta, GA 30339 USA  
(215) 997-4519  
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# CERTIFICATE ADDENDUM

Certificate Number: 111045.000  
ADDENDUM Page Six of Seven

The Quality Management System and implementation of:

## CommScope, Inc.

With site at:

## CommScope Asia (Suzhou) Technologies Co.,Ltd.

77 Qiming Road, Suzhou Industrial Park  
Suzhou, Jiangsu 215121  
Peoples Republic of China

meets the requirements of the standard:

## ISO 9001:2015

The validity of this certificate depends on the validity of the main certificate.

### Scope:

Production of network cable, fiber cable and communication equipment component (copper patch cords, copper panel, accessories etc.)

**Certification Structure:** Multi-site

Certificate Expires:	January 04, 2026
Certificate Issued:	January 05, 2023
Certified Since:	January 10, 2001



Dr. Cem O. Onus  
Managing Director

DEKRA Certification, Inc.  
1945 The Exchange SE #300  
Atlanta, GA 30339 USA  
(215) 997-4519  
<https://www.dekra.us/en/audits/>





# 证书附录

证书编号: 111045.000

附录第7页,共7页

质量管理体系和实施:

**CommScope, Inc.**

其场所:

**康普科技 (苏州) 有限公司**

中国江苏省苏州工业园区启明路77号,邮编215121

符合以下标准要求:

## ISO 9001:2015

本证书的有效性取决于主证书的有效性。

### 范围:

网络线、光缆、通信系统设备材料 (网络跳线、配线装置等) 的生产。

认证结构: 多场所

证书有效期: 2026.01.04

发证日期: 2023.01.05

首次发证日期: 2001.1.10



Dr. Cem O. Onus  
Managing Director

DEKRA Certification, Inc.  
1945 The Exchange SE #300  
Atlanta, GA 30339 USA  
(215) 997-4519  
<https://www.dekra.us/en/audits/>





# Certificate of Registration

## ENVIRONMENTAL MANAGEMENT SYSTEM - ISO 14001:2015

This is to certify that:

CommScope, Inc. of North Carolina  
1100 CommScope Place SE  
Hickory  
North Carolina  
28603-0339  
USA


Holds Certificate No:

**EMS 648387**

and operates an Environmental Management System which complies with the requirements of ISO 14001:2015 for the following scope:

The environmental management system to control the risks associated with the manufacture, distribution, field support and central function of telecommunication products and services.

For and on behalf of BSI:

  
Carlos Pitanga, Chief Operating Officer Assurance – Americas

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 1 of 5



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Certificate No: **EMS 648387**

Location	Registered Activities
Andrew Telecommunications de Reynosa S. de R.L. de C.V. Av. Industrial Reynosa Lte 2 al 5 Parque Industrial Center Reynosa Tamaulipas 88780 Mexico	Manufacture and distribution of telecommunication products including antenna and cable.
CommScope Asia (Suzhou) Technologies Co., Ltd. EPZ II, 77 Qiming Road Suzhou Industrial Park Suzhou Jiangsu 215121 China	Manufacture and distribution of telecommunication products, including cable.
Andrew Telecommunications India Pvt. Ltd. Plot No. N-2, Phase IV Verna Industrial Estate Verna Salcette Goa 403 722 India	Manufacture and distribution of telecommunication products, including antenna and cable.
CommScope EMEA Ltd. Corke Abbey Avenue Bray County Dublin A98FY03 Ireland	Manufacture and distribution of telecommunication products, including cable and connectors.
CommScope Telecommunications (China) Co., Ltd. 68 West Su Hong Xi Lu Suzhou Industrial Park Suzhou Jiangsu 215021 China	Manufacture and distribution of telecommunication products, including antenna and cables.

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 2 of 5

This certificate remains the property of BSI and shall be returned immediately upon request.

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Information and Contact: BSI, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP. Tel: + 44 345 080 9000  
BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.  
A Member of the BSI Group of Companies.

Certificate No: **EMS 648387**

Location	Registered Activities
Andrew Wireless Systems GmbH Industriering 10 Buchdorf 86675 Germany	Manufacture and distribution of telecommunication products, including amplifiers and antenna systems.
CommScope, Inc. of North Carolina 1100 CommScope Place SE Hickory North Carolina 28603-0339 USA	Corporate headquarters responsible for management system oversight of all locations listed on this certificate.
CommScope Inc. 6519 CommScope Road Catawba North Carolina 28609-0199 USA	Manufacture and distribution of telecommunication products, including cable.
CommScope Inc. 3642 US Hwy 70 East Claremont North Carolina 28610-0879 USA	Manufacture and distribution of telecommunication products, including cable.
CommScope Czech Republic s.r.o. Turanka 98B Brno 62700 Czech Republic	Manufacture and distribution of telecommunication products, including connectors and terminations.
CommScope Inc. of North Carolina 1100 CommScope Place SE Hickory North Carolina 28603-0339 USA	Customer care, facility maintenance, and administrative functions.
ADC de Delicias, S. de R.L. de C.V. Blvd. Fernando Baeza No. 1301 Sur Delicias Chihuahua 33000 Mexico	Manufacturing and distribution of telecommunication products.

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 3 of 5

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BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.

A Member of the BSI Group of Companies.



Certificate No: **EMS 648387**

Location	Registered Activities
ADC de Juarez S. de R.L. de C.V. Parque Industrial Antonio J Bermudez Ciudad Juarez Chihuahua 32470 Mexico	Manufacturing and distribution of telecommunication products.
CommScope Connectivity Belgium bvba Diestsesteenweg 692 Kessel-lo 3010 Belgium	Manufacture and distribution of telecommunication products.
CommScope Technologies de Juarez S. de R.L. de C.V. Santiago Troncoso 331 Praderas del Sur, Ciudad Juarez Chihuahua 32575 Mexico	Manufacture of Fiber Optic Splice Closures (FOSC), Fiber Guide Systems (FGS), Hardened Connectivity and Molding-Gel Filling, including: plastic injection molding, plastic extrusion, plastic and metal machining, and assembly operations.
CommScope Connectivity UK Limited Unit 1 Kinmel Park Bodelwyddan Rhyl, Denbighshire LL18 5TZ United Kingdom	Fibre optic cable manufacturing, termination and design of other telecommunication products and services.
CommScope 11312 S. Pipeline Road Euless Texas 76040 USA	Manufacture, distribution, field support and central function of telecommunication products.
ARRIS GROUP DE MEXICO SA DE CV Av. De la Paz, #11721 Parque Industrial Pacifico Tijuana Baja California 22643 Mexico	Manufacture, repair, support, repair service, distribution of products and components for telecommunications that provide integrated solutions for voice, video and data through the processes of SMT, manual and mechanical assembly, soldering (manual, selective, printed, wave) electrical testing and packaging.

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

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Information and Contact: BSI, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP. Tel: + 44 345 080 9000

BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.

A Member of the BSI Group of Companies.

Certificate No: **EMS 648387**

Location	Registered Activities
CommScope Design & Integration UK Ltd Unit 5 & 6, Eden Business Park Edenhouse Drive Old Malton Malton YO17 6AE United Kingdom	Manufacture and distribution of telecommunications products including cabinets.
Arris Indústria Eletrônica do Brasil Ltda. CNPJ: 09.154.836/0001-15 Avenida Torquato Tapajós, 9475 Tarumã Manaus Amazonas 69041-025 Brasil	Manufacturer and distribution of Receivers, Television signal Decoders and Modulator/Router.
CommScope Design and Integration UK Ltd. Lovell House, 412 The Quadrant Birchwood Park Warrington WA3 6FW United Kingdom	Telecommunications project management, site surveys, installations commissioning and rigging.

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 5 of 5

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Information and Contact: BSI, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP. Tel: + 44 345 080 9000  
BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.  
A Member of the BSI Group of Companies.

# Certificate of Registration

## QUALITY MANAGEMENT SYSTEM - ISO 9001:2015

This is to certify that:

Arris Indústria Eletrônica do Brasil  
Ltda.  
CNPJ: 09.154.836/0001-15  
Avenida Torquato Tapajós, 9475  
Tarumã  
Manaus  
Amazonas  
69041-025  
Brasil

Holds Certificate No:


**FM 752494**

and operates a Quality Management System which complies with the requirements of ISO 9001:2015 for the following scope:

Manufacture of Television Signal Receivers / Decoders and Modems / Routers.

This certificate is traceable to the certificate number SGQ-2276 originally issued by TÜV Rheinland do Brasil Ltda. in 2009-10-09.

For and on behalf of BSI:

  
Carlos Pitanga, Chief Operating Officer Assurance – Americas

Original Registration Date: 2009-10-09

Latest Revision Date: 2021-09-24

Effective Date: 2021-10-09

Expiry Date: 2024-10-08

Page: 1 of 1



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To be read in conjunction with the scope above or the attached appendix.

BSI Brasil: Rua Gomes de Carvalho, 1306 - 11º andar - Cjs.: 111/112, Vila Olímpia - São Paulo - SP - 04547-005 Telephone: +55 11-21489600

Americas Headquarters: BSI Group America Inc., 12950 Worldgate Drive, Suite 800, Herndon, VA 20170-6007 USA  
A Member of the BSI Group of Companies.



# Certificate of Registration

## ENVIRONMENTAL MANAGEMENT SYSTEM - ISO 14001:2015

This is to certify that:

CommScope, Inc. of North Carolina  
1100 CommScope Place SE  
Hickory  
North Carolina  
28603-0339  
USA


Holds Certificate No:

**EMS 648387**

and operates an Environmental Management System which complies with the requirements of ISO 14001:2015 for the following scope:

The environmental management system to control the risks associated with the manufacture, distribution, field support and central function of telecommunication products and services.

For and on behalf of BSI:

  
Carlos Pitanga, Chief Operating Officer Assurance – Americas

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 1 of 5



...making excellence a habit.™

Certificate No: **EMS 648387**

Location	Registered Activities
Andrew Telecommunications de Reynosa S. de R.L. de C.V. Av. Industrial Reynosa Lte 2 al 5 Parque Industrial Center Reynosa Tamaulipas 88780 Mexico	Manufacture and distribution of telecommunication products including antenna and cable.
CommScope Asia (Suzhou) Technologies Co., Ltd. EPZ II, 77 Qiming Road Suzhou Industrial Park Suzhou Jiangsu 215121 China	Manufacture and distribution of telecommunication products, including cable.
Andrew Telecommunications India Pvt. Ltd. Plot No. N-2, Phase IV Verna Industrial Estate Verna Salcette Goa 403 722 India	Manufacture and distribution of telecommunication products, including antenna and cable.
CommScope EMEA Ltd. Corke Abbey Avenue Bray County Dublin A98FY03 Ireland	Manufacture and distribution of telecommunication products, including cable and connectors.
CommScope Telecommunications (China) Co., Ltd. 68 West Su Hong Xi Lu Suzhou Industrial Park Suzhou Jiangsu 215021 China	Manufacture and distribution of telecommunication products, including antenna and cables.

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 2 of 5

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Information and Contact: BSI, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP. Tel: + 44 345 080 9000  
BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.  
A Member of the BSI Group of Companies.

Certificate No: **EMS 648387**

Location	Registered Activities
Andrew Wireless Systems GmbH Industriering 10 Buchdorf 86675 Germany	Manufacture and distribution of telecommunication products, including amplifiers and antenna systems.
CommScope, Inc. of North Carolina 1100 CommScope Place SE Hickory North Carolina 28603-0339 USA	Corporate headquarters responsible for management system oversight of all locations listed on this certificate.
CommScope Inc. 6519 CommScope Road Catawba North Carolina 28609-0199 USA	Manufacture and distribution of telecommunication products, including cable.
CommScope Inc. 3642 US Hwy 70 East Claremont North Carolina 28610-0879 USA	Manufacture and distribution of telecommunication products, including cable.
CommScope Czech Republic s.r.o. Turanka 98B Brno 62700 Czech Republic	Manufacture and distribution of telecommunication products, including connectors and terminations.
CommScope Inc. of North Carolina 1100 CommScope Place SE Hickory North Carolina 28603-0339 USA	Customer care, facility maintenance, and administrative functions.
ADC de Delicias, S. de R.L. de C.V. Blvd. Fernando Baeza No. 1301 Sur Delicias Chihuahua 33000 Mexico	Manufacturing and distribution of telecommunication products.

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 3 of 5

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BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.

A Member of the BSI Group of Companies.



Certificate No: **EMS 648387**

Location	Registered Activities
ADC de Juarez S. de R.L. de C.V. Parque Industrial Antonio J Bermudez Ciudad Juarez Chihuahua 32470 Mexico	Manufacturing and distribution of telecommunication products.
CommScope Connectivity Belgium bvba Diestsesteenweg 692 Kessel-lo 3010 Belgium	Manufacture and distribution of telecommunication products.
CommScope Technologies de Juarez S. de R.L. de C.V. Santiago Troncoso 331 Praderas del Sur, Ciudad Juarez Chihuahua 32575 Mexico	Manufacture of Fiber Optic Splice Closures (FOSC), Fiber Guide Systems (FGS), Hardened Connectivity and Molding-Gel Filling, including: plastic injection molding, plastic extrusion, plastic and metal machining, and assembly operations.
CommScope Connectivity UK Limited Unit 1 Kinmel Park Bodelwyddan Rhyl, Denbighshire LL18 5TZ United Kingdom	Fibre optic cable manufacturing, termination and design of other telecommunication products and services.
CommScope 11312 S. Pipeline Road Eules Texas 76040 USA	Manufacture, distribution, field support and central function of telecommunication products.
ARRIS GROUP DE MEXICO SA DE CV Av. De la Paz, #11721 Parque Industrial Pacifico Tijuana Baja California 22643 Mexico	Manufacture, repair, support, repair service, distribution of products and components for telecommunications that provide integrated solutions for voice, video and data through the processes of SMT, manual and mechanical assembly, soldering (manual, selective, printed, wave) electrical testing and packaging.

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

Page: 4 of 5

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To be read in conjunction with the scope above or the attached appendix.

Information and Contact: BSI, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP. Tel: + 44 345 080 9000

BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.

A Member of the BSI Group of Companies.

Certificate No: **EMS 648387**

Location	Registered Activities
CommScope Design & Integration UK Ltd Unit 5 & 6, Eden Business Park Edenhouse Drive Old Malton Malton YO17 6AE United Kingdom	Manufacture and distribution of telecommunications products including cabinets.
Arris Indústria Eletrônica do Brasil Ltda. CNPJ: 09.154.836/0001-15 Avenida Torquato Tapajós, 9475 Tarumã Manaus Amazonas 69041-025 Brasil	Manufacturer and distribution of Receivers, Television signal Decoders and Modulator/Router.
CommScope Design and Integration UK Ltd. Lovell House, 412 The Quadrant Birchwood Park Warrington WA3 6FW United Kingdom	Telecommunications project management, site surveys, installations commissioning and rigging.

Original Registration Date: 2016-03-01

Latest Revision Date: 2022-04-21

Effective Date: 2022-03-15

Expiry Date: 2025-03-14

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