760241704 | HEC-16KM-810-APV

HELIAX® LazrSPEED® Hybrid Cable

Product Classification

Regional Availability	Asia | Australia/New Zealand | EMEA | Latin America | North America
Portfolio	CommScope®
Product Type	Hybrid cable, copper and fiber
Product Brand	HELIAX® | LazrSPEED®

General Specifications

Application	Remote radio head
Cable Type	Wireless feeder
Conductors, quantity	8
Construction Type	Shielded
Fiber Short Description	RFF – 10AWG
Inner Shield (Tape) Material	Corrugated aluminum
Jacket Color	Black
Strength Members	Glass reinforced plastic rod
Subunit, quantity	8
Fibers per Subunit, quantity	2
Total Fiber Count	16

Dimensions

Buffer Tube/Subunit Diameter	3.556 mm | 0.14 in
Diameter Over Jacket	27.686 mm | 1.09 in
Conductor Gauge	10 AWG

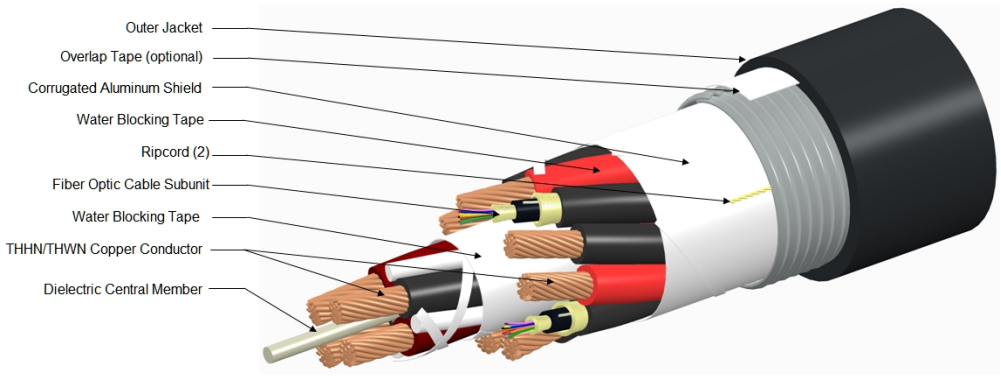
Electrical Specifications

dc Resistance Note	Maximum value based on a standard condition of 20 °C (68 °F)
dc Resistance, maximum	3.412 ohms/km | 1.04 ohms/kft

Representative Image

©2023 CommScope, Inc. All rights reserved. CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. For additional trademark information see https://www.commscope.com/trademarks. All product names, trademarks and registered trademarks are property of their respective owners. Revised: December 14, 2023

760241704 | HEC-16KM-810-APV



Material Specifications

Ripcord Material	Para-aramid synthetic fiber

Mechanical Specifications

Minimum Bend Radius, multiple bends, loaded	556.26 mm | 21.9 in
Minimum Bend Radius, multiple bends, unloaded	279.4 mm | 11 in
Minimum Bend Radius, single bend, unloaded	195.58 mm | 7.7 in
Tensile Load, long term, maximum	800.68 N | 180 lbf
Tensile Load, short term, maximum	2,668.932 N | 600 lbf
Compression	2.25 kg/mm | 126 lb/in
Compression Test Method	FOTP-41
Flex Test Method	FOTP-104
Impact	4.34 ft lb | 5.884 N-m
Impact Test Method	FOTP-25
Twist	10 cycles
Twist Test Method	FOTP-85

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 +80 °C (-40 °F to +176 °F)
Storage Temperature	-40 °C to +80 °C (-40 °F to +176 °F)

©2023 CommScope, Inc. All rights reserved. CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. For additional trademark information see https://www.commscope.com/trademarks. All product names, trademarks and registered trademarks are property of their respective owners. Revised: December 14, 2023

760241704 | HEC-16KM-810-APV

Cable Qualification Standards	ANSI/ICEA S-87-640 | Telcordia GR-20 | Telcordia GR-409
Environmental Space	Wireless installation

Packaging and Weights

Cable weight	1,004.511 kg/km | 675 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 www.commscope.com/ProductCompliance
ROHS	Compliant
UK-ROHS	Compliant

Included Products

CS-5K-MP	–	LazrSPEED® 550 OM4 Bend-Insensitive Multimode Fiber

* Footnotes

Operating Temperature	Specification applicable to non-terminated bulk fiber cable

©2023 CommScope, Inc. All rights reserved. CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. For additional trademark information see https://www.commscope.com/trademarks. All product names, trademarks and registered trademarks are property of their respective owners. Revised: December 14, 2023

CS-5K-MP

LazrSPEED® 550 LazrSPEED® 550 OM4 Bend-Insensitive Multimode Fiber

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, 75 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

Optical Specifications

Numerical Aperture	0.2
Numerical Aperture Tolerance	±0.015
Point Defects, maximum	0.15 dB

©2023 CommScope, Inc. All rights reserved. CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. For additional trademark information see https://www.commscope.com/trademarks. All product names, trademarks and registered trademarks are property of their respective owners. Revised: September 1, 2023

Zero Dispersion Slope, maximum	0.105 ps/[km-nm-nm]
Zero Dispersion Wavelength, maximum	1316 nm
Zero Dispersion Wavelength, minimum	1297 nm

Optical Specifications, Wavelength Specific

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

Environmental Specifications

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

Regulatory Compliance/Certifications

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

* Footnotes

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

©2023 CommScope, Inc. All rights reserved. CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. For additional trademark information see https://www.commscope.com/trademarks. All product names, trademarks and registered trademarks are property of their respective owners. Revised: September 1, 2023