

HELIAX® LazrSPEED® Hybrid Cable with aluminum armor

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

Armor Type

Corrugated aluminum

Cable Type

Wireless feeder

Conductors, quantity

4

Construction Type

Armored

Fiber Short Description

RFF – 6AWG

Fiber Type, quantity

8

Fibers per Subunit, quantity

8

Inner Shield (Tape) Material

Corrugated aluminum

Jacket Color

Black

Outer Shield (Tape) Material

PE

Strength Members

Glass reinforced plastic rod

Subunit, quantity

1

Total Fiber Count

8

Water Blocking Method

Water blocking tape(s) | Water blocking threads

Dimensions

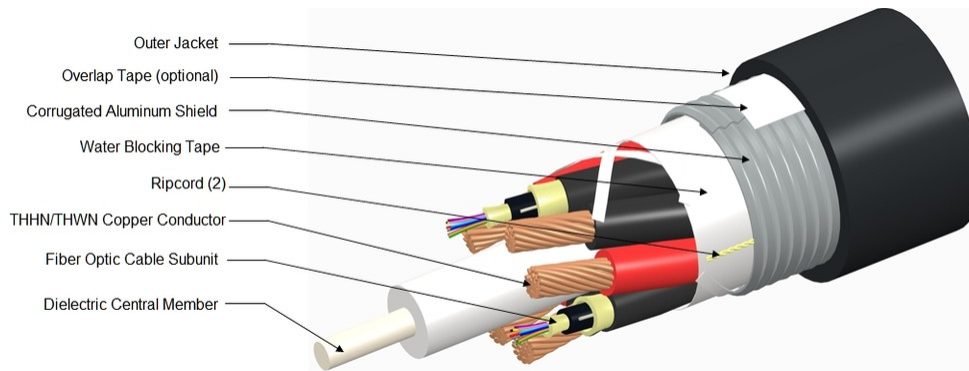
760200311 | HFC-8MM-406-APE

Buffer Tube/Subunit Diameter	6.096 mm 0.24 in
Diameter Over Jacket	22.606 mm 0.89 in
Conductor Gauge	6 AWG

Electrical Specifications

dc Resistance Note	Maximum value based on a standard condition of 20 °C (68 °F)
dc Resistance, maximum	1.352 ohms/km 0.412 ohms/kft

Representative Image



Material Specifications

Ripcord Material	Para-aramid synthetic fiber
-------------------------	-----------------------------

Mechanical Specifications

Minimum Bend Radius, multiple bends, loaded	452.12 mm 17.8 in
Minimum Bend Radius, multiple bends, unloaded	226.06 mm 8.9 in
Minimum Bend Radius, single bend, unloaded	157.48 mm 6.2 in
Tensile Load, long term, maximum	1,067.573 N 240 lbf
Tensile Load, short term, maximum	3,558.576 N 800 lbf
Compression	4.5 kg/mm 252 lb/in
Compression Test Method	FOTP-41
Flex Test Method	FOTP-104
Impact	2.17 ft lb 2.942 N-m
Impact Test Method	FOTP-25
Twist	10 cycles
Twist Test Method	FOTP-85

760200311 | HFC-8MM-406-APE

Optical Specifications

Fiber Type OM2+, LazrSPEED® 150 | OM2+, LazrSPEED® 150

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

Packaging and Weights

Cable weight 803.609 kg/km | 540 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



Included Products

CS-5M-MP – LazrSPEED® 150 OM2+ Bend-Insensitive Multimode Fiber

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

CS-5M-MP

LazrSPEED® 150 OM2+ Bend-Insensitive Multimode Fiber

LazrSPEED® 150

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/mm ² 100000 psi

Mechanical Specifications

Macrobending, 15 mm mandrel, 2 turns	0.20 dB @ 850 nm 0.50 dB @ 1,300 nm
Macrobending, 30 mm mandrel, 2 turns	0.10 dB @ 850 nm 0.30 dB @ 1,300 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-5M-MP

Optical Specifications

Numerical Aperture	0.2
Numerical Aperture Tolerance	±0.015
Point Defects, maximum	0.15 dB
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	600 m @ 1,300 nm 800 m @ 850 nm
10 Gbps Ethernet Distance	150 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	500 MHz-km @ 1,300 nm 950 MHz-km @ 850 nm
Bandwidth, OFL, minimum	500 MHz-km @ 1,300 nm 700 MHz-km @ 850 nm
Differential Mode Delay	0.70 ps/m @ 850 nm 0.88 ps/m @ 1,300 nm
Index of Refraction	1.479 @ 1,300 nm 1.483 @ 850 nm
Standards Compliance	TIA-492AAAB (OM2+)

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)
----------------------------------------	-----------------------------------------------------------------------------

CS-5M-MP

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