

HELIAX® Hybrid Cable, UL Type TC-OF-ER

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®

General Specifications

Application

Remote radio head

Cable Type

Wireless feeder

Conductors, quantity

2

Construction Type

Shielded

Fiber Short Description

RFF – 10AWG

Fiber Type, quantity

4

Fibers per Subunit, quantity

4

Inner Shield (Tape) Material

Corrugated aluminum

Jacket Color

Black

Outer Shield (Tape) Material

PVC

Strength Members

Glass reinforced plastic rod

Subunit, quantity

1

Total Fiber Count

4

Dimensions

Buffer Tube/Subunit Diameter

3.556 mm | 0.14 in

Diameter Over Jacket

16.002 mm | 0.63 in

760221275 | HTC-4SM-210-APVA

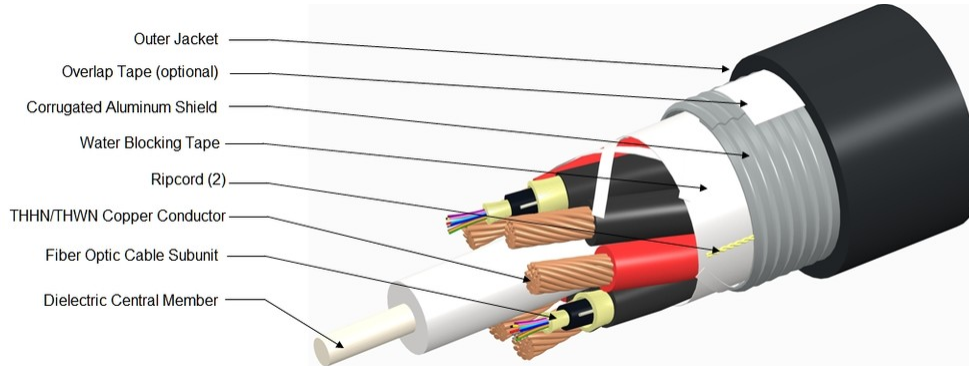
Conductor Gauge 10 AWG

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



Material Specifications

Ripcord Material Para-aramid synthetic fiber

Mechanical Specifications

Minimum Bend Radius, multiple bends, loaded 322.58 mm | 12.7 in

Minimum Bend Radius, multiple bends, unloaded 193.04 mm | 7.6 in

Minimum Bend Radius, single bend, unloaded 111.76 mm | 4.4 in

Tensile Load, long term, maximum 400.34 N | 90 lbf

Tensile Load, short term, maximum 1,334.466 N | 300 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 G.657.A2/B2 | G.657.A2/B2

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 +70 °C (-40 °F to +158 °F)
Cable Qualification Standards	ANSI/ICEA S-87-640 Telcordia GR-20 Telcordia GR-409
Environmental Space	Wireless installation
Jacket UV Resistance	UV stabilized

Packaging and Weights

Cable weight	318.467 kg/km 214 lb/kft
---------------------	----------------------------

Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value
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