

HELIAX® FiberFeed® 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	FiberFeed® HELIAX® LazrSPEED®

General Specifications

Application	Remote radio head
Armor Type	Corrugated aluminum
Cable Type	Wireless feeder
Conductors, quantity	8
Construction Type	Armored
Fiber Short Description	RFF – 10AWG
Fiber Type, quantity	16
Fibers per Subunit, quantity	2
Filler, quantity	1
Inner Shield (Tape) Material	Corrugated aluminum
Jacket Color	Black
Outer Shield (Tape) Material	PE
Strength Members	Glass reinforced plastic rod
Subunit, quantity	8
Total Fiber Count	16
Water Blocking Method	Water blocking tape(s) Water blocking threads

760217794 | HFC-16MM-810-APE

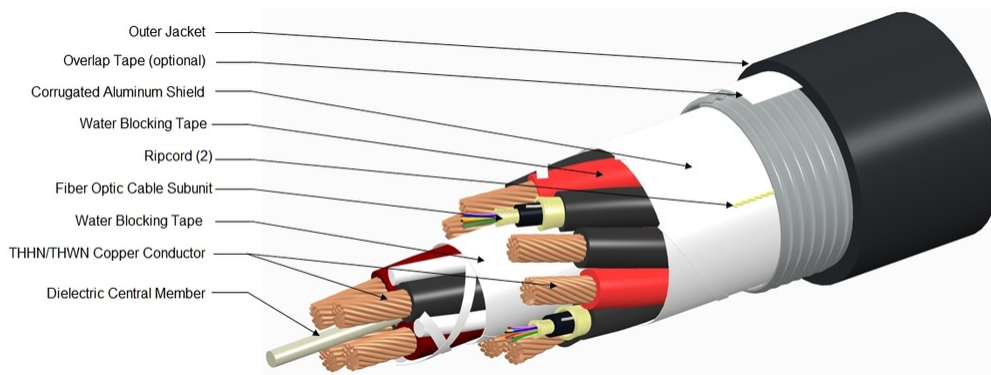
Dimensions

Buffer Tube/Subunit Diameter	3.556 mm 0.14 in
Diameter Over Jacket	23.622 mm 0.93 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



Material Specifications

Ripcord Material	Para-aramid synthetic fiber
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Mechanical Specifications

Minimum Bend Radius, multiple bends, loaded	469.9 mm 18.5 in
Minimum Bend Radius, multiple bends, unloaded	236.22 mm 9.3 in
Minimum Bend Radius, single bend, unloaded	152.4 mm 6 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	2.17 ft lb 2.942 N-m
Impact Test Method	FOTP-25
Twist	10 cycles

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Twist Test Method FOTP-85

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 758.964 kg/km | 510 lb/kft

Regulatory Compliance/Certifications

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



Included Products

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

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

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

Optical Specifications

CS-5M-MP

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)
Temperature Humidity Cycling, maximum	Temperature humidity cycling is conducted at -10 °C to +85 °C (+14 °F to +185 °F)

CS-5M-MP

up to 95% relative humidity