HFC-16MM-806-618-APE



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
Alarm Wire, quantity	6
Armor Type	Corrugated aluminum
Cable Type	Wireless feeder
Conductors, quantity	8
Construction Type	Armored
Fiber Short Description	RFF – 6AWG
Fiber Type, quantity	16
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	2
Total Fiber Count	16
Water Blocking Method	Water blocking tape(s) Water blocking threads

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Dimensions

Buffer Tube/Subunit Diameter	6.096 mm 0.24 in
Diameter Over Jacket	30.734 mm 1.21 in
Alarm Wire Gauge	18 AWG
Conductor Gauge	6 AWG

Electrical Specifications

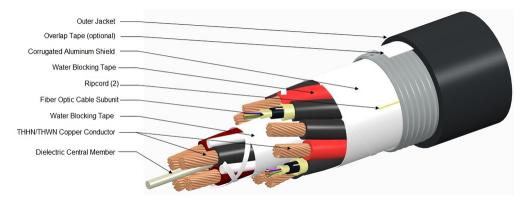
dc Resistance Note

dc Resistance, maximum

Maximum value based on a standard condition of 20 $^\circ\mathrm{C}$ (68 $^\circ\mathrm{F})$

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	614.68 mm 24.2 in
Minimum Bend Radius, multiple bends, unloaded	307.34 mm 12.1 in
Minimum Bend Radius, single bend, unloaded	215.9 mm 8.5 in
Tensile Load, long term, maximum	1,067.573 N 240 lbf
Tensile Load, short term, maximum	3,558.576 N 800 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

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Twist	10 cycles
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	1,616.146 kg/km 1086 lb/kft
Regulatory Compliance/Certifications	
Agency Classification	

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	
Macrohending, 15 mm mandrel, 2 turns	0.20 dB @ 850 pm 0.50 dB @ 1.300 u

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

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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

ISO

Classification

ISO 9001:2015

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* Footnotes

Temperature Dependence, maximum

Temperature dependence is conducted at -60 °C to +85 °C (-76 °F to +185 °F)

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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

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