

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 | 8 |
| Construction Type | Armored |
| Fiber Short Description | RFF – 12AWG |
| 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 |

760187922 | HFC-16MM-812-APE

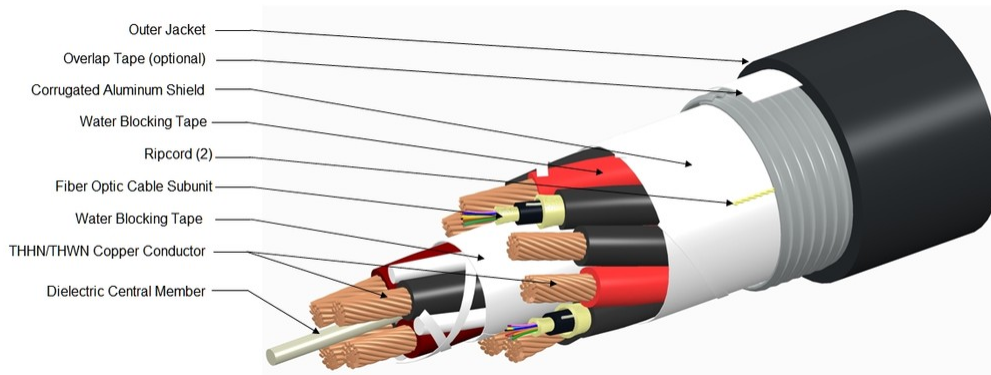
Dimensions

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|-------------------------------------|---------------------|
| Buffer Tube/Subunit Diameter | 3.048 mm 0.12 in |
| Diameter Over Jacket | 19.812 mm 0.78 in |
| Conductor Gauge | 12 AWG |

Electrical Specifications

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|-------------------------------|--|
| dc Resistance Note | Maximum value based on a standard condition of 20 °C (68 °F) |
| dc Resistance, maximum | 5.413 ohms/km 1.65 ohms/kft |

Representative Image



Material Specifications

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

Mechanical Specifications

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|--|------------------------|
| Minimum Bend Radius, multiple bends, loaded | 396.24 mm 15.6 in |
| Minimum Bend Radius, multiple bends, unloaded | 198.12 mm 7.8 in |
| Minimum Bend Radius, single bend, unloaded | 139.7 mm 5.5 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 516.393 kg/km | 347 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

CS-5M-MP

LazrSPEED® 150 OM2+ Bend-Insensitive Multimode Fiber

LazrSPEED® 150

Product Classification

| | |
|---------------------|---------------|
| Portfolio | CommScope® |
| Product Type | Optical fiber |

General Specifications

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|--|--|
| 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

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|---|---------------------------------------|
| 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

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|----------------------------------|---|
| 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

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|--|--------------------|
| 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) |
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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