760187906 | HEC-16MM-810-APV

HELIAX® LazrSPEED® Hybrid Cable

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

Cable Type Wireless feeder

Conductors, quantity 8

Construction Type Shielded

Fiber Short Description RFF – 10AWG

Fiber Type, quantity 16

Fibers per Subunit, quantity 2

Inner Shield (Tape) Material Corrugated aluminum

Jacket Color Black

Outer Shield (Tape) Material PVC

Strength Members Glass reinforced plastic rod

Subunit, quantity 8

Total Fiber Count 16

Water Blocking Method Water blocking tape(s) | Water blocking threads

Dimensions

Buffer Tube/Subunit Diameter3.556 mm | 0.14 inDiameter Over Jacket27.686 mm | 1.09 in

Conductor Gauge 10 AWG

Electrical Specifications

dc Resistance Note Maximum value based on a standard condition of 20 °C (68 °F)

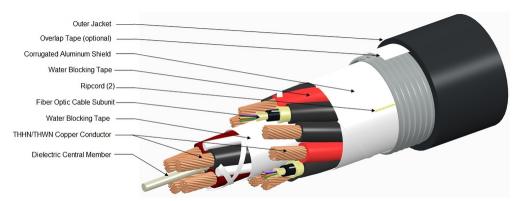
dc Resistance, maximum 3.412 ohms/km | 1.04 ohms/kft

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Representative Image



Material Specifications

Ripcord Material Para-aramid synthetic fiber

Mechanical Specifications

Minimum Bend Radius, multiple bends, loaded 556.26 mm | 21.9 in

Minimum Bend Radius, multiple bends, unloaded 279.4 mm | 11 in

Minimum Bend Radius, single bend, unloaded 195.58 mm | 7.7 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 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 OM2+, LazrSPEED® 150 | OM2+, LazrSPEED® 150

Environmental Specifications

Installation temperature $-30 \,^{\circ}\text{C to} + 70 \,^{\circ}\text{C (-22 °F to} + 158 °F)$ Operating Temperature $-40 \,^{\circ}\text{C to} + 80 \,^{\circ}\text{C (-40 °F to} + 176 \,^{\circ}\text{F)}$

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Storage Temperature $-40 \,^{\circ}\text{C}$ to $+80 \,^{\circ}\text{C}$ (-40 $^{\circ}\text{F}$ to $+176 \,^{\circ}\text{F}$)

Cable Qualification Standards ANSI/ICEA S-87-640 | Telcordia GR-20 | Telcordia GR-409

Environmental Space Wireless installation

Packaging and Weights

Cable weight 1,004.511 kg/km | 675 lb/kft

Regulatory Compliance/Certifications

CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this

Classification

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



Agency

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)** $254 \, \mu m$ **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

Proof Test 689.476 N/mm² | 100000 psi

Mechanical Specifications

Core/Clad Offset, maximum

 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

 $1.5 \, \mu m$

Coating Strip Force, maximum $8.9 \,\mathrm{N}$ | $2.001 \,\mathrm{lbf}$ Coating Strip Force, minimum $1.3 \,\mathrm{N}$ | $0.292 \,\mathrm{lbf}$

Dynamic Fatigue Parameter, minimum 18

COMMSCOPE®

CS-5M-MP

Optical Specifications

Numerical Aperture 0.2

Numerical Aperture Tolerance±0.015Point Defects, maximum0.15 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, maximum0.1 dB/kmTemperature Humidity Cycling, maximum0.2 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

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