

# 760230439 | HEC-36MM-1806M5-AHFF

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## HELIAX® LazrSPEED® Hybrid Cable

### Product Classification

<b>Regional Availability</b>	Asia   Australia/New Zealand   EMEA   Latin America   North America
<b>Portfolio</b>	CommScope®
<b>Product Type</b>	Hybrid cable, copper and fiber
<b>Product Brand</b>	HELIAX®   LazrSPEED®

### General Specifications

<b>Application</b>	Remote radio head
<b>Cable Type</b>	Wireless feeder
<b>Conductors, quantity</b>	18
<b>Construction Type</b>	Shielded
<b>Fiber Short Description</b>	RFF-6 mm <sup>2</sup>
<b>Fiber Type, quantity</b>	36
<b>Fibers per Subunit, quantity</b>	12
<b>Inner Shield (Tape) Material</b>	Corrugated aluminum
<b>Jacket Color</b>	Black
<b>Outer Shield (Tape) Material</b>	Fire retardant PE
<b>Subunit, quantity</b>	3
<b>Total Fiber Count</b>	36
<b>Water Blocking Method</b>	Water blocking tape(s)   Water blocking threads

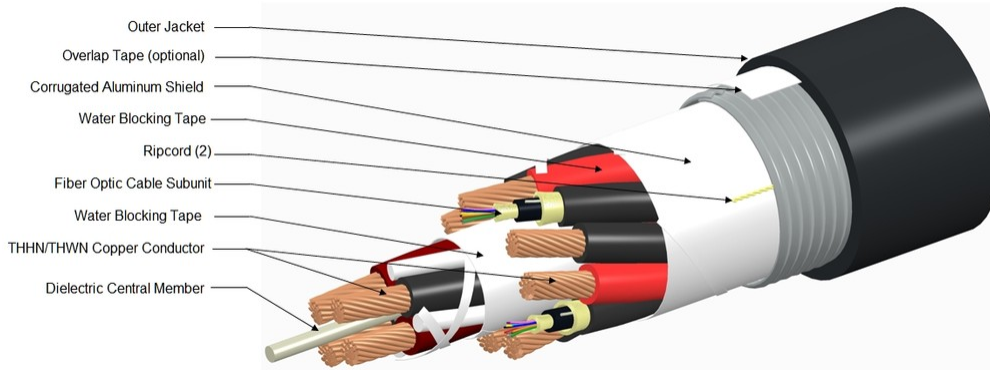
### Dimensions

<b>Buffer Tube/Subunit Diameter</b>	4.572 mm   0.18 in
<b>Diameter Over Jacket</b>	31.75 mm   1.25 in
<b>Conductor Gauge</b>	6 mm <sup>2</sup> class 5

### Electrical Specifications

<b>dc Resistance Note</b>	Maximum value based on a standard condition of 20 °C (68 °F)
<b>dc Resistance, maximum</b>	3.301 ohms/km   1.006 ohms/kft

## Representative Image



## Material Specifications

**Ripcord Material** Para-aramid synthetic fiber

## Mechanical Specifications

<b>Minimum Bend Radius, multiple bends, loaded</b>	635 mm   25 in
<b>Minimum Bend Radius, multiple bends, unloaded</b>	381 mm   15 in
<b>Minimum Bend Radius, single bend, unloaded</b>	223.52 mm   8.8 in
<b>Tensile Load, long term, maximum</b>	800.68 N   180 lbf
<b>Tensile Load, short term, maximum</b>	2,668.932 N   600 lbf
<b>Compression</b>	2.25 kg/mm   126 lb/in
<b>Compression Test Method</b>	FOTP-41
<b>Flex Test Method</b>	FOTP-104
<b>Impact</b>	4.34 ft lb   5.884 N-m
<b>Impact Test Method</b>	FOTP-25
<b>Twist</b>	10 cycles
<b>Twist Test Method</b>	FOTP-85

## Optical Specifications

**Fiber Type** OM2+, LazrSPEED® 150 | OM2+, LazrSPEED® 150

## Environmental Specifications

<b>Installation temperature</b>	-30 °C to +70 °C (-22 °F to +158 °F)
<b>Operating Temperature</b>	-40 °C to +80 °C (-40 °F to +176 °F)

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<b>Storage Temperature</b>	-40 °C to +80 °C (-40 °F to +176 °F)
<b>Cable Qualification Standards</b>	ANSI/ICEA S-87-640   Telcordia GR-20   Telcordia GR-409
<b>Environmental Space</b>	Wireless installation

## Packaging and Weights

<b>Cable weight</b>	1,579.537 kg/km   1,061.4 lb/kft
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## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
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
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## \* Footnotes

**Operating Temperature** Specification applicable to non-terminated bulk fiber cable

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## LazrSPEED® 150 OM2+ Bend-Insensitive Multimode Fiber

### LazrSPEED® 150

#### Product Classification

<b>Portfolio</b>	CommScope®
<b>Product Type</b>	Optical fiber

#### General Specifications

<b>Cladding Diameter</b>	125 µm
<b>Cladding Diameter Tolerance</b>	±0.8 µm
<b>Cladding Non-Circularity, maximum</b>	1 %
<b>Coating Diameter (Colored)</b>	254 µm
<b>Coating Diameter (Uncolored)</b>	245 µm
<b>Coating Diameter Tolerance (Colored)</b>	±7 µm
<b>Coating Diameter Tolerance (Uncolored)</b>	±10 µm
<b>Coating/Cladding Concentricity Error, maximum</b>	12 µm
<b>Core Diameter</b>	50 µm
<b>Core Diameter Tolerance</b>	±2.5 µm
<b>Core/Clad Offset, maximum</b>	1.5 µm
<b>Proof Test</b>	689.476 N/mm <sup>2</sup>   100000 psi

#### Mechanical Specifications

<b>Macrobending, 15 mm mandrel, 2 turns</b>	0.20 dB @ 850 nm   0.50 dB @ 1,300 nm
<b>Macrobending, 30 mm mandrel, 2 turns</b>	0.10 dB @ 850 nm   0.30 dB @ 1,300 nm
<b>Coating Strip Force, maximum</b>	8.9 N   2.001 lbf
<b>Coating Strip Force, minimum</b>	1.3 N   0.292 lbf
<b>Dynamic Fatigue Parameter, minimum</b>	18

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## Optical Specifications

<b>Numerical Aperture</b>	0.2
<b>Numerical Aperture Tolerance</b>	±0.015
<b>Point Defects, maximum</b>	0.15 dB
<b>Zero Dispersion Slope, maximum</b>	0.105 ps/[km-nm-nm]
<b>Zero Dispersion Wavelength, maximum</b>	1316 nm
<b>Zero Dispersion Wavelength, minimum</b>	1297 nm

## Optical Specifications, Wavelength Specific

<b>1 Gbps Ethernet Distance</b>	600 m @ 1,300 nm   800 m @ 850 nm
<b>10 Gbps Ethernet Distance</b>	150 m @ 850 nm
<b>Attenuation, maximum</b>	1.00 dB/km @ 1,300 nm   3.00 dB/km @ 850 nm
<b>Backscatter Coefficient</b>	-68.0 dB @ 850 nm   -75.7 dB @ 1,300 nm
<b>Bandwidth, Laser, minimum</b>	500 MHz-km @ 1,300 nm   950 MHz-km @ 850 nm
<b>Bandwidth, OFL, minimum</b>	500 MHz-km @ 1,300 nm   700 MHz-km @ 850 nm
<b>Differential Mode Delay</b>	0.70 ps/m @ 850 nm   0.88 ps/m @ 1,300 nm
<b>Index of Refraction</b>	1.479 @ 1,300 nm   1.483 @ 850 nm
<b>Standards Compliance</b>	TIA-492AAAB (OM2+)

## Environmental Specifications

<b>Heat Aging, maximum</b>	0.20 dB/km @ 85 °C
<b>Temperature Dependence, maximum</b>	0.1 dB/km
<b>Temperature Humidity Cycling, maximum</b>	0.2 dB/km
<b>Water Immersion, maximum</b>	0.20 dB/km @ 23 °C

## Regulatory Compliance/Certifications

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



## \* Footnotes

<b>Temperature Dependence, maximum</b>	Temperature dependence is conducted at -60 °C to +85 °C (-76 °F to +185 °F)
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**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