

## 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>	12
<b>Construction Type</b>	Shielded
<b>Fiber Short Description</b>	RFF – 10AWG
<b>Inner Shield (Tape) Material</b>	Corrugated aluminum
<b>Jacket Color</b>	Black
<b>Outer Shield (Tape) Material</b>	PVC
<b>Strength Members</b>	Glass reinforced plastic rod
<b>Subunit, quantity</b>	2
<b>Fibers per Subunit, quantity</b>	2
<b>Total Fiber Count</b>	24
<b>Water Blocking Method</b>	Water blocking tape(s)   Water blocking threads

### Dimensions

<b>Buffer Tube/Subunit Diameter</b>	3.556 mm   0.14 in
<b>Diameter Over Jacket</b>	27.94 mm   1.1 in

# 760194126 | HEC-24MM-1210-APV

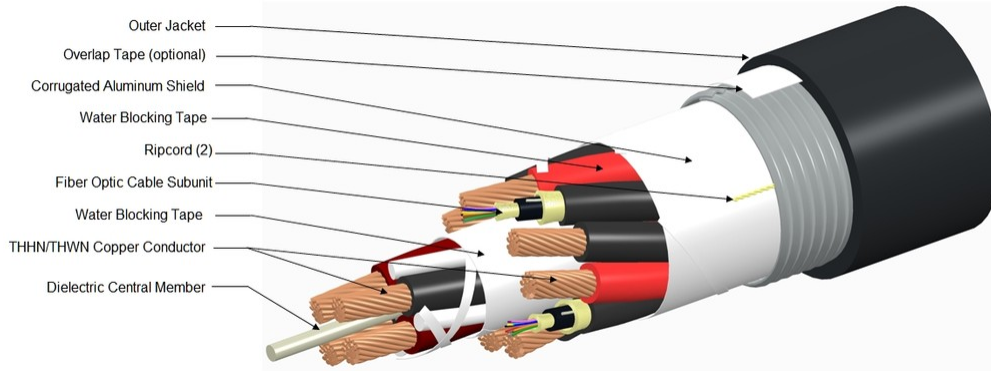
**Conductor Gauge** 10 AWG

## 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

## Mechanical Specifications

**Minimum Bend Radius, multiple bends, loaded** 558.8 mm | 22 in  
**Minimum Bend Radius, multiple bends, unloaded** 335.28 mm | 13.2 in  
**Minimum Bend Radius, single bend, unloaded** 177.8 mm | 7 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** 4.34 ft lb | 5.884 N-m  
**Impact Test Method** FOTP-25  
**Twist** 10 cycles  
**Twist Test Method** FOTP-85

## Optical Specifications

# 760194126 | HEC-24MM-1210-APV

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**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** 1,177.138 kg/km | 791 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

<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 Ø mandrel, 2 turns</b>	0.20 dB @ 850 nm   0.50 dB @ 1,300 nm
<b>Macrobending, 30 mm Ø 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

# CS-5M-MP

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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)
<b>Temperature Humidity Cycling, maximum</b>	Temperature humidity cycling is conducted at -10 °C to +85 °C (+14 °F to +185 °F) up to 95% relative humidity