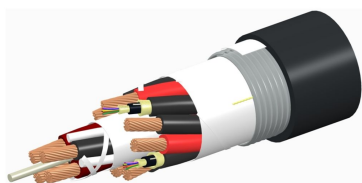


## HELIAX® FiberFeed® Hybrid Cable, UL Type TC-OF-ER



### Product Classification

#### Regional Availability

Asia | Australia/New Zealand | EMEA | Latin America | North America

#### Portfolio

CommScope®

#### Product Type

Hybrid cable, copper and fiber

#### Product Brand

FiberFeed® | HELIAX®

### General Specifications

#### Application

Remote radio head

#### Cable Type

Wireless feeder

#### Conductors, quantity

12

#### Construction Type

Shielded

#### Fiber Short Description

RFF – 10AWG

#### Fiber Type, quantity

24

#### 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

2

#### Total Fiber Count

24

#### Water Blocking Method

Water blocking tape(s) | Water blocking threads

### Dimensions

#### Buffer Tube/Subunit Diameter

3.556 mm | 0.14 in

# 760219972 | HTC-24SM-1210-APVD

**Diameter Over Jacket** 25.146 mm | 0.99 in

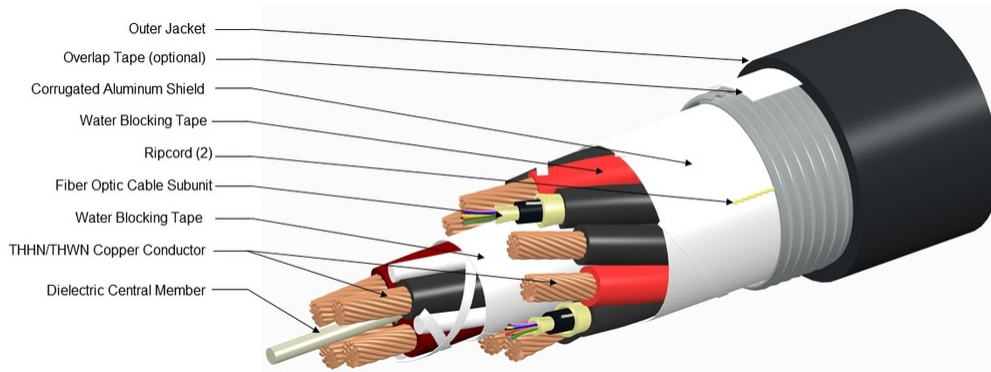
**Conductor Gauge** 10 AWG

## 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

## Representative Image



## Material Specifications

**Ripcord Material** Para-aramid synthetic fiber

## Mechanical Specifications

**Minimum Bend Radius, multiple bends, loaded** 502.92 mm | 19.8 in

**Minimum Bend Radius, multiple bends, unloaded** 251.46 mm | 9.9 in

**Minimum Bend Radius, single bend, unloaded** 175.26 mm | 6.9 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

# 760219972 | HTC-24SM-1210-APVD

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## Optical Specifications

**Fiber Type** G.657.A2/B2 | G.657.A2/B2

## 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** 1,049.9 kg/km | 705.5 lb/kft

## Regulatory Compliance/Certifications

### Agency

ISO 9001:2015



### Classification

Designed, manufactured and/or distributed under this quality management system

## Included Products

CS-8G-MP – Enhanced Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode Fiber (ITU-T G.657.A2, B2)

## \* Footnotes

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

# CS-8G-MP

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Enhanced Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode Fiber (ITU-T G.657.A2, B2)

## 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>                   | ±0.7 µm                                |
| <b>Cladding Non-Circularity, maximum</b>             | 0.7 %                                  |
| <b>Coating Diameter (Colored)</b>                    | 249 µm                                 |
| <b>Coating Diameter (Uncolored)</b>                  | 242 µm                                 |
| <b>Coating Diameter Tolerance (Colored)</b>          | ±13 µm                                 |
| <b>Coating Diameter Tolerance (Uncolored)</b>        | ±5 µm                                  |
| <b>Coating/Cladding Concentricity Error, maximum</b> | 12 µm                                  |
| <b>Core/Clad Offset, maximum</b>                     | 0.5 µm                                 |
| <b>Proof Test</b>                                    | 689.476 N/mm <sup>2</sup>   100000 psi |

## Dimensions

|                            |                 |
|----------------------------|-----------------|
| <b>Fiber Curl, minimum</b> | 4 m   13.123 ft |
|----------------------------|-----------------|

## Mechanical Specifications

|  |   |
|--|---|
| <b>Macrobending, 15 mm mandrel, 1 turn</b>   | 0.50 dB @ 1,550 nm   1.00 dB @ 1,625 nm |
| <b>Macrobending, 20 mm mandrel, 1 turn</b>   | 0.10 dB @ 1,550 nm   0.20 dB @ 1,625 nm |
| <b>Macrobending, 30 mm mandrel, 10 turns</b> | 0.03 dB @ 1,550 nm   0.10 dB @ 1,625 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>    | 20                                      |

## Optical Specifications

|  |                     |
|--|---------------------|
| <b>Cabled Cutoff Wavelength, maximum</b> | 1260 nm             |
| <b>Point Defects, maximum</b>            | 0.1 dB              |
| <b>Zero Dispersion Slope, maximum</b>    | 0.092 ps/[km-nm-nm] |

# CS-8G-MP

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|  |         |
|--|---------|
| <b>Zero Dispersion Wavelength, maximum</b> | 1324 nm |
| <b>Zero Dispersion Wavelength, minimum</b> | 1302 nm |

## Optical Specifications, Wavelength Specific

|  |   |
|--|---|
| <b>Attenuation, maximum</b>                                    | 0.40 dB/km @ 1,310 nm   0.40 dB/km @ 1,385 nm   0.40 dB/km @ 1,550 nm   0.50 dB/km @ 1,625 nm |
| <b>Dispersion, maximum</b>                                     | 18 ps(nm-km) at 1550 nm   3.5 ps(nm-km) from 1285 nm to 1330 nm at 1310 nm                    |
| <b>Index of Refraction</b>                                     | 1.467 @ 1,310 nm   1.467 @ 1,385 nm   1.468 @ 1,550 nm  |
| <b>Mode Field Diameter</b>                                     | 8.6 $\mu\text{m}$ @ 1,310 nm   9.8 $\mu\text{m}$ @ 1,550 nm                                   |
| <b>Mode Field Diameter Tolerance</b>                           | $\pm 0.4 \mu\text{m}$ @ 1310 nm   $\pm 0.5 \mu\text{m}$ @ 1550 nm                             |
| <b>Polarization Mode Dispersion Link Design Value, maximum</b> | 0.06 ps/sqrt(km)  |
| <b>Standards Compliance</b>                                    | ITU-T G.657.A2   ITU-T G.657.B2   |

## Environmental Specifications

|  |                    |
|--|--------------------|
| <b>Heat Aging, maximum</b>                   | 0.05 dB/km @ 85 °C |
| <b>Temperature Dependence, maximum</b>       | 0.05 dB/km         |
| <b>Temperature Humidity Cycling, maximum</b> | 0.05 dB/km         |
| <b>Water Immersion, maximum</b>              | 0.05 dB/km @ 23 °C |

## Regulatory Compliance/Certifications

| <b>Agency</b> | <b>Classification</b>  |
|---------------|--|
| 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 |