

HELIAX® 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

HELIAX®

## General Specifications

### Application

Remote radio head

### Alarm Wire, quantity

2

### Cable Type

Wireless feeder

### Conductors, quantity

10

### Construction Type

Shielded

### Fiber Short Description

RFF – 6AWG

### Fiber Type, quantity

36

### Fibers per Subunit, quantity

12

### Inner Shield (Tape) Material

Corrugated aluminum

### Jacket Color

Off-white

### Outer Shield (Tape) Material

PVC

### Strength Members

Glass reinforced plastic rod

### Subunit, quantity

3

### Total Fiber Count

36

### Water Blocking Method

Water blocking tape(s) | Water blocking threads

## Dimensions

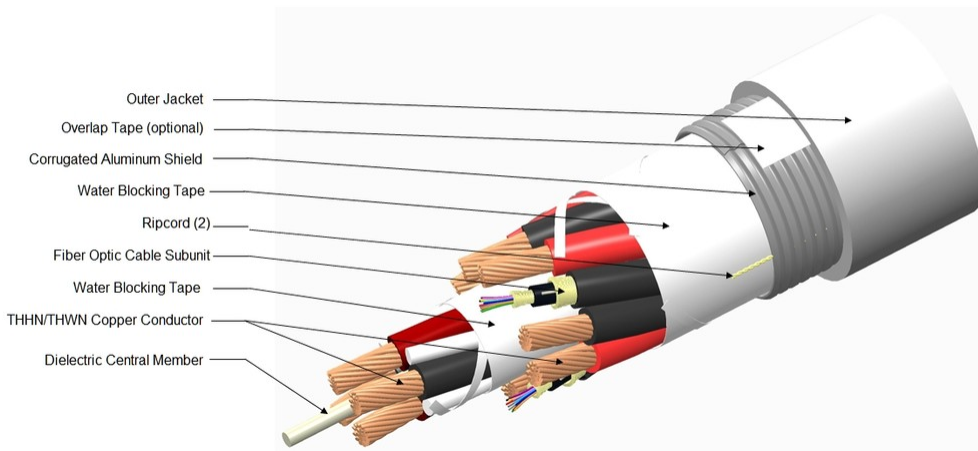
# 760190579 | HTC-36SM-1006-218-APV/WH

<b>Buffer Tube/Subunit Diameter</b>	6.096 mm   0.24 in
<b>Diameter Over Jacket</b>	35.306 mm   1.39 in
<b>Alarm Wire Gauge</b>	18 AWG
<b>Conductor Gauge</b>	6 AWG

## Electrical Specifications

<b>dc Resistance Note</b>	Maximum value based on a standard condition of 20 °C (68 °F)
<b>dc Resistance, maximum</b>	1.352 ohms/km   0.412 ohms/kft

## Representative Image



## Material Specifications

<b>Ripcord Material</b>	Para-aramid synthetic fiber
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## Mechanical Specifications

<b>Minimum Bend Radius, multiple bends, loaded</b>	708.66 mm   27.9 in
<b>Minimum Bend Radius, multiple bends, unloaded</b>	353.06 mm   13.9 in
<b>Minimum Bend Radius, single bend, unloaded</b>	248.92 mm   9.8 in
<b>Tensile Load, long term, maximum</b>	2,001.699 N   450 lbf
<b>Tensile Load, short term, maximum</b>	6,672.33 N   1500 lbf
<b>Compression</b>	4.465 kg/mm   250 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

**Twist** 10 cycles  
**Twist Test Method** FOTP-85

## 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-104-696 | ANSI/ICEA S-87-640 | Telcordia GR-20 | Telcordia GR-409 | UL 1277  
**Environmental Space** Wireless installation

## Packaging and Weights

**Cable weight** 2,113.193 kg/km | 1420 lb/kft

## Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value
REACH-SVHC	Compliant as per SVHC revision on <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a>
ROHS	Compliant



## 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
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## 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

# CS-8G-MP

<b>Zero Dispersion Slope, maximum</b>	0.092 ps/[km-nm-nm]
<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