



Fiber Optic Cable, 48-fiber, OS2, yellow

**OBSOLETE**  
This product was discontinued on: March 31, 2023

Product Classification

Regional Availability	Asia   Australia/New Zealand   EMEA
Portfolio	CommScope®
Product Type	Fiber indoor/outdoor cable
Product Series	C-LN

General Specifications

Cable Type	Loose tube
Subunit Type	Gel-free
Filler, quantity	4
Jacket Color	Yellow
Jacket Marking	Meters
Fibers per Subunit, quantity	12
Total Fiber Count	48

Dimensions

Cable Length	2000 m   6,561.68 ft
Diameter Over Jacket	11.5 mm   0.453 in

Mechanical Specifications

Minimum Bend Radius, loaded	228.6 mm   9 in
Minimum Bend Radius, unloaded	170.2 mm   6.701 in
Tensile Load, long term, maximum	600 N   134.885 lbf
Tensile Load, short term, maximum	996 N   223.91 lbf

Optical Specifications

Fiber Type	G.652.D and G.657.A1, TeraSPEED®   OS2
Optical Specifications, Wavelength Specific	
Attenuation, maximum	0.22 dB/km @ 1,550 nm   0.31 dB/km @ 1,385 nm   0.34 dB/km @ 1,310 nm
Standards Compliance	TIA-492CAAB (OS2)

Environmental Specifications

Installation temperature	-5 °C to +50 °C (+23 °F to +122 °F)
Operating Temperature	-10 °C to +70 °C (+14 °F to +158 °F)
Storage Temperature	-10 °C to +60 °C (+14 °F to +140 °F)
EN50575 CPR Cable EuroClass Fire Performance	Eca
Environmental Space	Universal Low Smoke Zero Halogen (ULSZH)

Packaging and Weights

Cable weight	105 kg/km   70.557 lb/kft
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Regulatory Compliance/Certifications

Agency	Classification
CENELEC	EN 50575 compliant, Declaration of Performance (DoP) available
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
UK-ROHS	Compliant



Included Products

CS-8W-250-EMEA – LightScope® ZWP Singlemode Fiber  
8W-250um

\* Footnotes

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

LightScope® ZWP Singlemode Fiber



Product Classification

Portfolio	CommScope®
Product Type	Optical fiber

General Specifications

Cladding Diameter	125 µm
Cladding Diameter Tolerance	±0.7 µm
Cladding Non-Circularity, maximum	0.7 %
Coating Diameter (Colored)	249 µm
Coating Diameter (Uncolored)	242 µm
Coating Diameter Tolerance (Colored)	±13 µm
Coating Diameter Tolerance (Uncolored)	±7 µm
Coating/Cladding Concentricity Error, maximum	12 µm
Core/Clad Offset, maximum	0.5 µm
Proof Tensile Stress	100,000 psi (0.69 GPa)

Dimensions

Fiber Curl, minimum	4 m   13.123 ft
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Mechanical Specifications

Macrobending, 20 mm Ø mandrel, 1 turn	0.75 dB @ 1,550 nm   1.50 dB @ 1,625 nm
Macrobending, 30 mm Ø mandrel, 10 turns	0.25 dB @ 1,550 nm   1.00 dB @ 1,625 nm
Macrobending, 60 mm Ø mandrel, 100 turns	0.05 dB @ 1,550 nm   0.05 dB @ 1,625 nm
Coating Strip Force, maximum	8.9 N   2.001 lbf
Coating Strip Force, minimum	1.3 N   0.292 lbf
Dynamic Fatigue Parameter, minimum	20

Optical Specifications

# CS-8W-250-EMEA | 8W-250um

Cabled Cutoff Wavelength, maximum	1250 nm
Point Defects, maximum	0.05 dB
Zero Dispersion Slope, maximum	0.092 ps/[km-nm-nm]
Zero Dispersion Wavelength, maximum	1324 nm
Zero Dispersion Wavelength, minimum	1300 nm

## Optical Specifications, Wavelength Specific

Attenuation, maximum	0.20 dB/km @ 1550 nm   0.23 dB/km @ 1,625 nm   0.344 dB/km @ 1310 nm   0.344 dB/km @ 1380 – 1385 nm
Dispersion, maximum	18 ps(nm-km) at 1550 nm   22 ps(nm-km) at 1625 nm   3.5 ps(nm-km) from 1285 nm to 1330 nm at 1310 nm
Index of Refraction	1.467 @ 1,310 nm   1.467 @ 1,385 nm   1.468 @ 1,550 nm
Mode Field Diameter	10.4 µm @ 1,550 nm   9.2 µm @ 1,310 nm
Mode Field Diameter Tolerance	±0.4 µm @ 1310 nm   ±0.5 µm @ 1550 nm
Polarization Mode Dispersion Link Design Value, maximum	0.05 ps/sqrt(km)
Standards Compliance	ITU-T G.652.D   ITU-T G.657.A1

## Environmental Specifications

Heat Aging, maximum	0.05 dB/km @ 85 °C
Temperature Dependence, maximum	0.05 dB/km
Temperature Humidity Cycling, maximum	0.05 dB/km
Water Immersion, maximum	0.05 dB/km @ 23 °C

## \* Footnotes

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