

Fiber indoor cable, LazrSPEED® Plenum Distribution, 48-Fiber Multi-Unit with 12-Fiber Subunits, Multimode OM5, Gel-free, Feet jacket marking, Lime green jacket color

Product Classification

Regional Availability	Asia   Australia/New Zealand   Latin America   Middle East /Africa   North America
Portfolio	CommScope®
Product Type	Fiber indoor cable
Product Series	P-DS

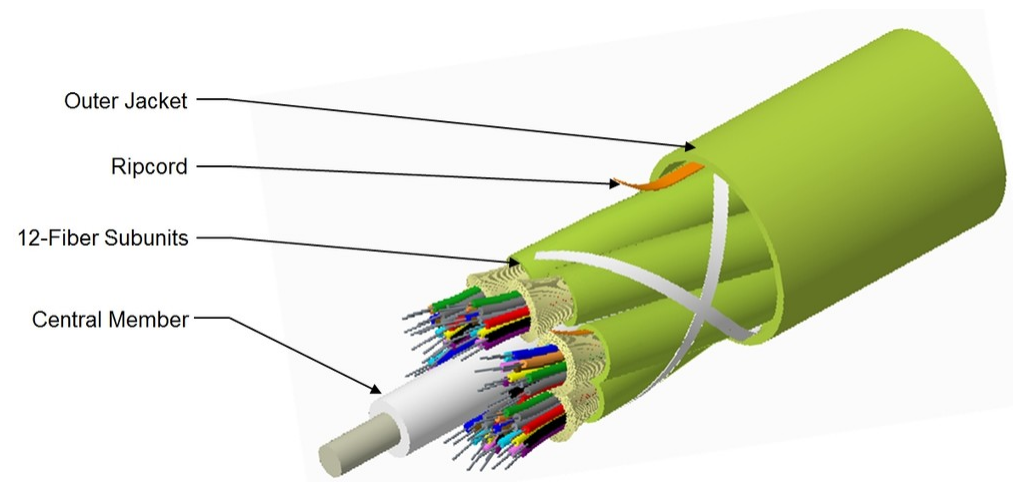
General Specifications

Cable Type	Distribution
Construction Type	Non-armored
Subunit Type	Gel-free
Jacket Color	Lime green
Jacket Marking	Feet
Subunit, quantity	4
Fibers per Subunit, quantity	12
Total Fiber Count	48

Dimensions

Buffer Tube/Subunit Diameter	5.77 mm   0.227 in
Diameter Over Jacket	14.91 mm   0.587 in

Representative Image



## Mechanical Specifications

Minimum Bend Radius, loaded	224 mm   8.819 in
Minimum Bend Radius, unloaded	149 mm   5.866 in
Tensile Load, long term, maximum	400 N   89.924 lbf
Tensile Load, short term, maximum	1335 N   300.12 lbf
Compression	10 N/mm   57.101 lb/in
Compression Test Method	FOTP-41   IEC 60794-1 E3
Flex	100 cycles
Flex Test Method	FOTP-104   IEC 60794-1 E6
Impact	5.88 N-m   52.042 in lb
Impact Test Method	FOTP-25   IEC 60794-1 E4
Strain	See long and short term tensile loads
Strain Test Method	FOTP-33   IEC 60794-1 E1
Twist	10 cycles
Twist Test Method	FOTP-85   IEC 60794-1 E7
Vertical Rise, maximum	199 m   652.887 ft

## Optical Specifications

Fiber Type	OM5, LazrSPEED® wideband   OM5, LazrSPEED® wideband
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## Environmental Specifications

Installation temperature	0 °C to +70 °C (+32 °F to +158 °F)
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Operating Temperature	-20 °C to +70 °C (-4 °F to +158 °F)
Storage Temperature	-40 °C to +70 °C (-40 °F to +158 °F)
Cable Qualification Standards	ANSI/ICEA S-83-596   Telcordia GR-409
Environmental Space	Plenum
Flame Test Listing	NEC OFNP (ETL) and c(ETL)
Flame Test Method	NFPA 130   NFPA 262

### Environmental Test Specifications

Heat Age	-20 °C to +85 °C (-4 °F to +185 °F)
Heat Age Test Method	IEC 60794-1 F9
Low High Bend	-20 °C to +70 °C (-4 °F to +158 °F)
Low High Bend Test Method	FOTP-37   IEC 60794-1 E11
Temperature Cycle	-20 °C to +70 °C (-4 °F to +158 °F)
Temperature Cycle Test Method	FOTP-3   IEC 60794-1 F1

### Packaging and Weights

Cable weight	205 kg/km   137.754 lb/kft
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### Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
ROHS	Compliant
UK-ROHS	Compliant



### Included Products

- CS-5G-TB
- LazrSPEED® OM5 WideBand Multimode Fiber

### \* Footnotes

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

LazrSPEED®

LazrSPEED® OM5 WideBand Multimode Fiber

Product Classification

Portfolio	CommScope®
Product Type	Optical fiber

General Specifications

Cladding Diameter	125 µm
Cladding Diameter Tolerance	±5 µm
Cladding Non-Circularity, maximum	0.7 %
Coating Diameter (Colored)	254 µm
Coating Diameter (Uncolored)	242 µm
Coating Diameter Tolerance (Colored)	±7 µm
Coating Diameter Tolerance (Uncolored)	±5 µm
Coating/Cladding Concentricity Error, maximum	12 µm
Core Diameter	50 µm
Core Diameter Tolerance	±2.5 µm
Core/Clad Offset, maximum	1 µm
Proof Tensile Stress	100,000 psi (0.69 GPa)
Tight Buffer Diameter	900 µm
Tight Buffer Diameter Tolerance	±40 µm

Mechanical Specifications

Macrobending, 15 mm Ø mandrel, 2 turns	0.20 dB @ 850 nm   0.50 dB @ 1,300 nm
Macrobending, 30 mm Ø mandrel, 2 turns	0.10 dB @ 850 nm   0.30 dB @ 1,300 nm
Macrobending, 75 mm Ø mandrel, 100 turns	0.50 dB @ 1,300 nm   0.50 dB @ 850 nm
Coating Strip Force, maximum	4.5 N   1.012 lbf
Coating Strip Force, minimum	0.9 N   0.202 lbf
Dynamic Fatigue Parameter, minimum	18

# CS-5G-TB

## Optical Specifications

Numerical Aperture	0.2
Numerical Aperture Tolerance	±0.010
Point Defects, maximum	0.15 dB
Zero Dispersion Slope, maximum (OM5)	-412/(840(1-(λ0/840)^4)) ps/[km-nm-nm]
Zero Dispersion Wavelength, maximum	1328 nm
Zero Dispersion Wavelength, minimum	1297 nm

## Optical Specifications, Wavelength Specific

1 Gbps Ethernet Distance	1,110 m @ 850 nm   600 m @ 1,300 nm
10 Gbps Ethernet Distance	550 m @ 850 nm
Attenuation, maximum	1.00 dB/km @ 1,300 nm   2.20 dB/km @ 953 nm   3.00 dB/km @ 850 nm
Bandwidth, Laser, minimum	2,600 MHz-km @ 953 nm   4,700 MHz-km @ 850 nm   500 MHz-km @ 1,300 nm
Bandwidth, OFL, minimum	1,950 MHz-km @ 953 nm   3,500 MHz-km @ 850 nm   500 MHz-km @ 1,300 nm
Index of Refraction	1.478 @ 1,300 nm   1.483 @ 850 nm
Standards Compliance	ANSI/TIA-492AAAF (OM5)   ANSI/TIA-568.3 (OM5)   IEC 60793-2-10, A1 (OM5)   ISO/IEC 11801-1 cabled optical fiber performance category OM5

## Environmental Specifications

Heat Aging, maximum	0.10 dB/km @ 85 °C
Temperature Dependence, maximum	0.1 dB/km
Temperature Humidity Cycling, maximum	0.1 dB/km
Water Immersion, maximum	0.10 dB/km @ 23 °C

## Regulatory Compliance/Certifications

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

## \* 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)

# CS-5G-TB

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up to 95% relative humidity