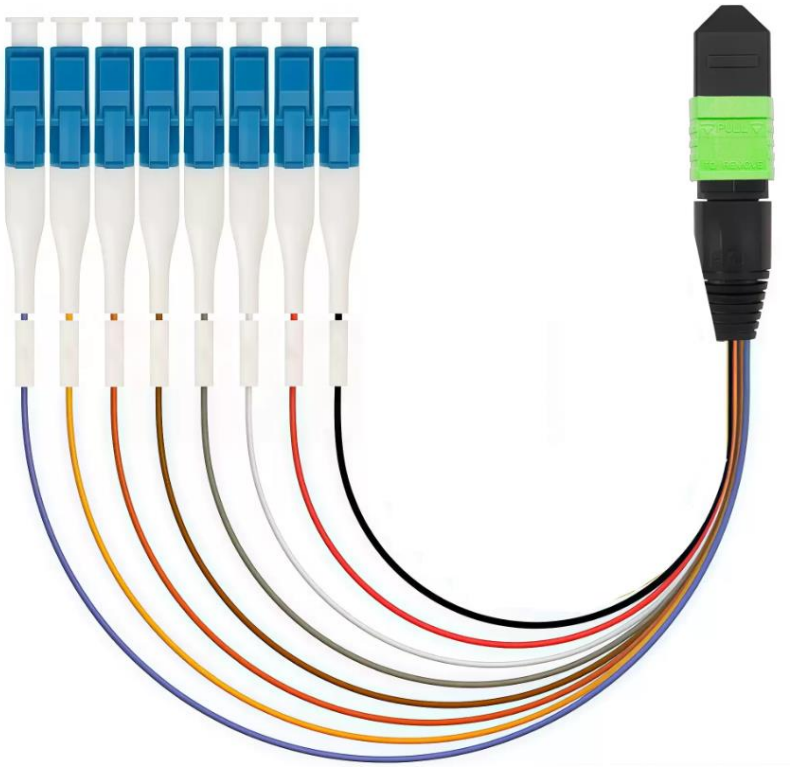
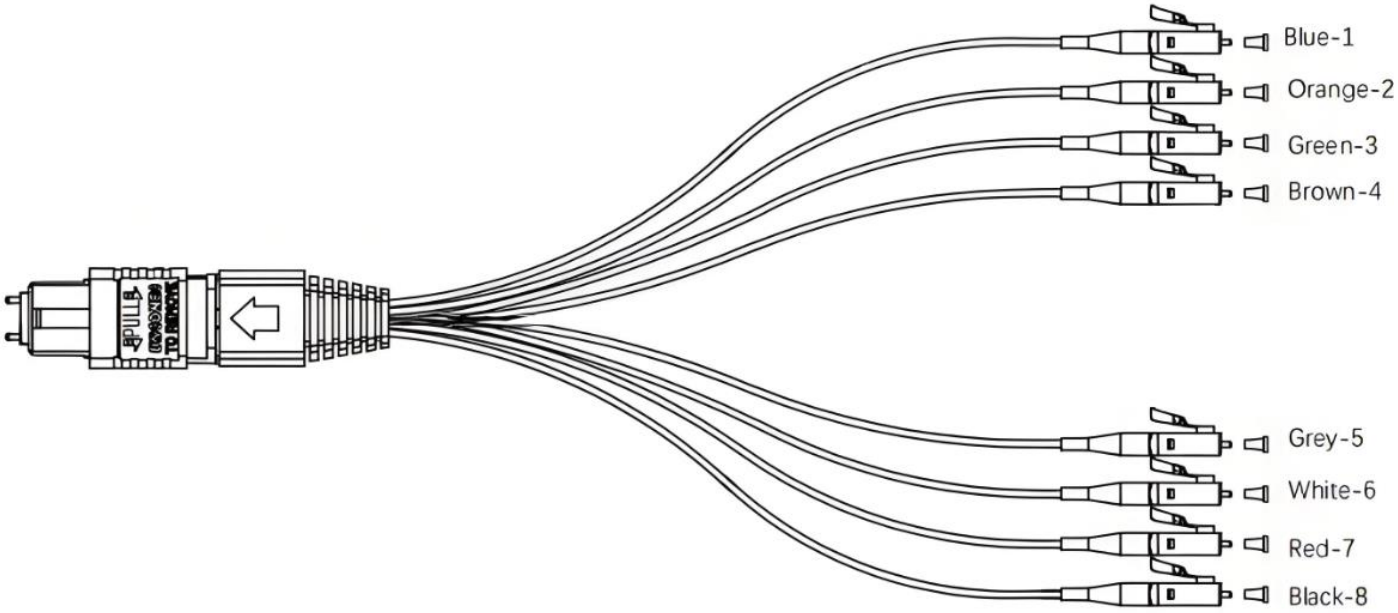
Fiber Optic Patch Cord 8 cores MPO/MTP Male to 0.9mm LC/UPC SM G657A1 Corning® Fiber LSZH/OFNR/OFNP 0.3m

UnitekFiber specializes in manufacturing high-quality fanout MPO/MTP-LC fiber patch cords, which are widely deployed in structured cabling systems and fiber patch panel connections. We offer a full range of fiber options including single-mode OS2 and multimode OM1/OM2/OM3/OM4/OM5 to satisfy diverse network deployment needs.

Our 0.3-meter fanout MPO/MTP-LC patch cords are available in 8-core, 12-core, and 24-core configurations, and feature premium cable jackets in LSZH, OFNR, and OFNP grades to comply with stringent safety and installation requirements. Specifically engineered for high-density data center applications to ensure efficient, space-saving, and reliable optical connectivity.



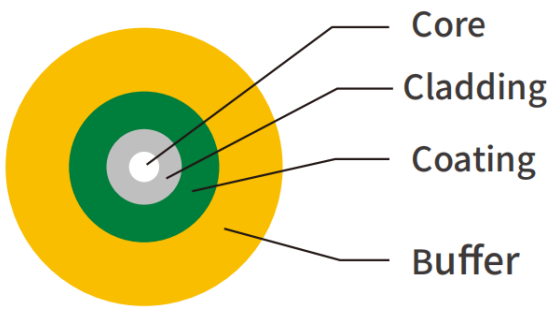
Drawings：

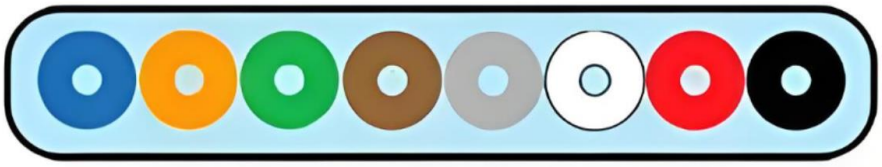


Connector Technical Parameter

Model		SM
Connector A : MPO/MTP		
Insertion Loss	Standard	≤0.70dB
	Elite Low Loss	≤0.35dB
Return Loss		APC≥60dB
Test Wavelength		1310nm&1550nm
Connector B: LC		
Insertion Loss	Standard	≤0.30dB
Return Loss		UPC≥50dB
Test Wavelength		1310nm&1550nm

Cable Structure Diagram





8-fiber ribbon fiber

Cable Dimensions and Constructions

Items		Descriptions
Optical Fiber	Fiber count	8
	Color	Optical Fiber Chromatography
Sheath	Material	LSZH/OFNR/OFNP
	Color	Blue、Orange、Green、Brown、Grey、White、Red、Black
	Diameter	0.9±0.05mm

Mechanical and Environmental Characteristics

Items	Descriptions	
Tensile	short-term	6N
	long-term	2N
Min.Bend Radius（Dynamic）	mm	50
Min.Bend Radius（Static）	mm	30
Operating Temperature	- 2 0 ℃-+ 6 0 ℃	
Temperature Range	- 2 0 ℃-+ 6 0 ℃	

Fiber Attenuation

Corning® G657A1 Optical Fiber

Optical Specifications

Maximum Attenuation

Wavelength (nm)	Maximum Value* (dB/km)
1310	≤ 0.32
1383	≤ 0.32
1490	≤ 0.21
1550	≤ 0.18
1625	≤ 0.20

*Alternate attenuation offerings available upon request.

**Attenuation values at this wavelength represent post-hydrogen aging performance.

Attenuation vs. Wavelength

Range (nm)	Ref. λ (nm)	Max. α Difference (dB/km)
1285 – 1330	1310	0.03
1525 – 1575	1550	0.02

The attenuation in a given wavelength range does not exceed the attenuation of the reference wavelength (λ) by more than the value α.

Macrobend Loss

Mandrel Radius (mm)	Number of Turns	Wavelength (nm)	Induced Attenuation* (dB)
10	1	1550	≤ 0.50
10	1	1625	≤ 1.5
15	10	1550	≤ 0.05
15	10	1625	≤ 0.30
30	100	1625	≤ 0.1

*The induced attenuation due to fiber wrapped around a mandrel of a specified radius.

Point Discontinuity

Wavelength (nm)	Point Discontinuity (dB)
1310	≤ 0.05
1550	≤ 0.05

Cable Cutoff Wavelength (λcc)

λ_{cc} ≤ 1260 nm

Mode Field Diamete

Wavelength (nm)	Mode Field Diameter (μm)
1310	9.2 ± 0.4
1550	10.4 ± 0.5

Dispersion

Wavelength (nm)	Dispersion Value [ps/(nm•km)]
1550	≤ 18
1625	≤ 22

Zero Dispersion Wavelength (λ_0):1304 nm ≤ λ_0 ≤ 1324 nm Zero Dispersion Slope (S_0): ≤ 0.092 ps/(nm^2•km)

Polarization Mode Dispersion (PMD)

	Value (ps/√km)
PMD Link Design Value	≤ 0.04*
Maximum Individual Fiber PMD	≤ 0.1

*Complies with ITU-T G.650-2 Appendix IV, (m = 20, Q = 0.01%), August 2015.

The PMD link design value is a term used to describe the PMD of concatenated lengths of fiber (also known as PMDQ). This value represents a statistical upper limit for total link PMD. Individual PMD values may change when fiber is cabled.

Dimensional Specifications

Glass Geometry

Fiber Curl	≥4.0m radius of curvature
Cladding Diameter	125.0 ± 0.7 μm

Coating Geometry

Coating Diameter	242 ± 5 μm
Coating-Cladding Concentricity	< 12 μm

Core-Clad Concentricity	≤ 0.5 μm
Cladding Non-Circularity	≤ 0.7%

Environmental Specifications

Environmental Test	Test Condition	Induced Attenuation 1310 nm, 1550 nm, and 1625 nm (dB/km)
Temperature Dependence	-60°C to +85°C*	≤ 0.05
Temperature Humidity Cycling	-10°C to +85°C up to 98% RH	≤ 0.05
Water Immersion	23°C ± 2°C	≤ 0.05
Heat Aging	85°C ± 2°C	≤ 0.05
Damp Heat	85°C at 85% RH	≤ 0.05

Operating Temperature Range: -60°C to +85°C

*Reference temperature = +23°C

Mechanical Specifications

Proof Test

The entire fiber length is subjected to a tensile stress≥100kpsi (0.69GPa). Higher proof test levels are available.

Length

Fiber lengths available up to 50.4 km/spool.

Performance Characterizations

Characterized parameters are typical values.

Core Diameter	8.2 μm
Numerical Aperture	0.14 NA is measured at the one percent power level of a one-dimensional far-field scan at 1310 nm.
Effective Group Index of Refraction (n_{eff})	1310 nm: 1.4676 1550 nm: 1.4682
Fatigue Resistance Parameter (n_d)	20
Coating Strip Force	Dry: 0.6 lbs. (3 N) Wet, 14-day room temperature: 0.6 lbs. (3 N)
Rayleigh Backscatter Coefficient (for 1 ns Pulse Width)	1310 nm: -77 dB 1550 nm: -82 dB