

Fiber Optic Patch Cable Uniboot LC-LC Fiber Patch Cord 9/125um SM 2.0mm OFNR

LC-LC Cable

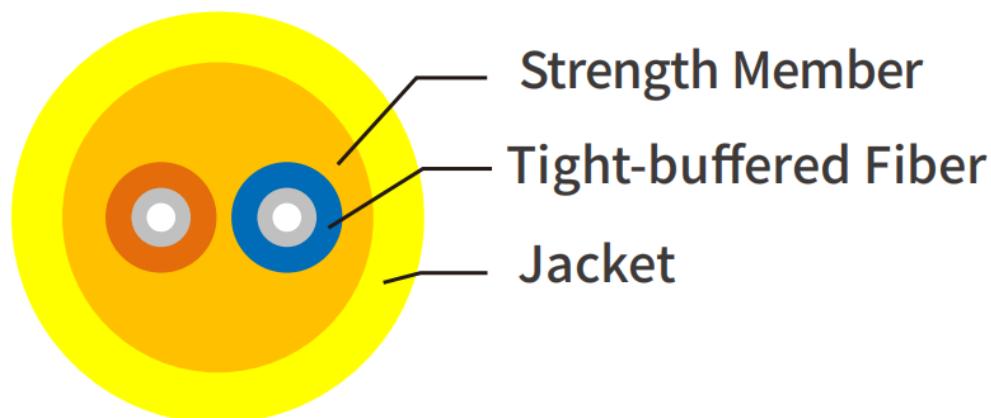
UnitekFiber provide patch cord. Patch cord means that the terminations are connect at both ends of the optical cable to realize the optical path active connection. Optical Fiber Patch cord is similar to coaxial cable except that there is no mesh shield. The light-transmitting glass core is in the central. The fiber core has a diameter of 9/125um 50/125 μ m and 65/125 μ m for SM and multi mode fiber path cord, which is roughly equivalent to the thickness of a human hair. The diameter for single mode fiber core is 8 μ m to 10 μ m. The fiber core is wrapped by a glass which is having a lower index of refraction than the core to maintain the fiber within the core.



Connector Technical Parameter

Model	SM
Connector A :Uniboot LC	
Insertion Loss	Standard 0.30dB
Return Loss	UPC≥50dB
Durability(500 Matings)	≤0.2dB
Test Wavelength	1310nm&1550nm
Connector B:Uniboot LC	
Insertion Loss	Standard 0.30dB
Return Loss	UPC≥50dB
Durability(500 Matings)	≤0.2dB
Test Wavelength	1310nm&1550nm

Cable Structure Diagram



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Cable Parameters

Items		Specifications
Fiber Count		2
Tight-buffered Fiber	Dimension	850±50μm
	Material	PVC
	Color	Blue、Orange
Strength Member		Aramid Yarn
Outer Jacket	Dimension	2.0mm
	Material	LSZH-OFNR
	Color	Yellow

Mechanical and Environmental Characteristics

Items		Specifications
Fiber Count		2
Tension (Long Term) / N		150
Tension (Short Term) / N		300
Crush (Long Term) / N/10cm		200
Crush (Short Term) / N/10cm		1000
Min. Bend Radius (Dynamic) / mm		20D
Min. Bend Radius (Static) / mm		10D
Installation Temperature/°C		-20～+60
Operating Temperature/°C		-20～+60

Fiber Attenuation

The properties of single mode optical fiber (ITU-T Rec. G.657A1)

Characteristic	Condition	Data	Unit
Attenuation	1310nm	≤ 0.35	dB/km
	1383nm(氢老化后)	≤ 0.35	dB/km
	1490nm	≤ 0.23	dB/km
	1550nm	≤ 0.22	dB/km
	1625nm	≤ 0.23	dB/km
Relative wavelength attenuation @1310nm @1550nm	1285~1330nm	≤ 0.05	dB/km
	1525~1575nm	≤ 0.05	dB/km
Dispersion in the wavelength range of	1285~1340nm	≤ 3.5	ps/(nm.km)
	1550nm	≤ 18	ps/(nm.km)
Zero dispersion wavelength		1300~1324	nm
A zero-dispersion slope		≤ 0.092	ps/(nm ² .km)
Polarization Mode Dispersion Coefficient PMD Single fiber maximum Fiber link value (M=20, Q=0.01%) Typical value		≤ 0.2	ps/
		≤ 0.1	ps/
		0.04	ps/
Cable cut-off wavelength (λ_{cc})		≤ 1260	nm
Mode field diameter (MFD)	1310nm	8.8 ± 0.4	μm
	1550nm	9.8 ± 0.5	μm
Attenuation discontinuities	1310nm	≤ 0.05	dB
	1550nm	≤ 0.05	dB
Geometric characteristics			
Core diameter		125 ± 0.7	μm
Cladding roundness		≤ 0.7	%
Coating diameter		245 ± 5	μm
Coating / package concentricity error		≤ 12.0	μm
Core / package concentricity error		≤ 0.5	μm
The warpage (radius)		≥ 4	m

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Environmental characteristics (1310nm、1550nm、1625nm)

Temperature additional attenuation	-60°C ~+85°C	≤0.05	dB/km
Temperature-humidity cycle additional attenuation	-10°C ~+85°C , 98% Relative humidity	≤0.05	dB/km
Flooding additional attenuation	23°C , 30 days	≤0.05	dB/km
Hot and humid additional attenuation	85°C 和 85% Relative humidity , 30 days	≤0.05	dB/km
Dry heat aging	85°C	≤0.05	dB/km
Screening tension		≥9.0	N
The macro bend Additional attenuation			
10 CircleΦ30mm	1550nm	≤0.025	dB
10 CircleΦ30mm	1625nm	≤1.0	dB
1 CircleΦ20mm	1550nm	≤0.75	dB
1 CircleΦ20mm	1625nm	≤1.5	dB
Coating peeling force	Typical average	1.5	N
Dynamic fatigue parameters		≥20	

Packing

According to customer request.

Delivery Length

Standard Reel Length:0.5-2.0 km. ; According to customer request.

Marking

Cable Marker every Meter by

- Year of manufacture

- Type of Cable

- Number of fiber

- Cable length

- Etc

According to customer or our company request .