Fiber Optical Patchcord|ST/PC-ST/PC Fiber Jumper Multi-mode OM3 Duplex 3.0mm PVC-OFNR

Fiber Cable

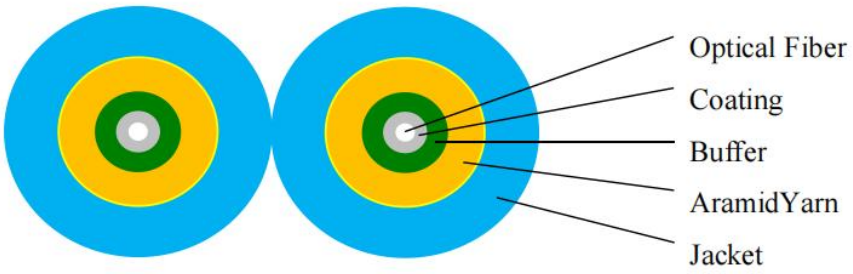
Unitek Fiber provide patch cord. Patch cord means that the terminations are connect at both ends of the optical cable to realize the optical path active connection. Optical Fiber Patch cord is similar to coaxial cable except that there is no mesh shield. The light-transmitting glass core is in the central. The fiber core has a diameter of 9/125um 50/125μm and 65/125 μm 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 8μm to 10μm. 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.

Drawings：

Connector Technical Parameter

Model		MM
Connector A : ST		
Insertion Loss	Standard	≤0.30dB
Return Loss		PC≥35dB
Durability(500 Matings)		≤0.2dB
Test Wavelength		850nm& 1300nm
Connector B: ST		
Insertion Loss	Standard	≤0.30dB
Return Loss		PC≥35dB
Durability(500 Matings)		≤0.2dB
Test Wavelength		850nm& 1300nm

Cable Structure Diagram



Cable Dimensions and Constructions

Items		Descriptions
Optical Fiber	Fiber count	2
	Color	Optical Fiber Chromatography
	Diameter	850±50μm
Strength Member	Material	Aramid yarn
Sheath	Material	OFNR-PVC

	Color	Aqua
	Diameter	3.0±0.10mm

Mechanical and Environmental Characteristics

Items	Descriptions	
Crush Resistance	short-term	500N/100mm
	long-term	100N/100mm
Tensile	short-term	150N
	long-term	80N
Min.Bend Radius（Dynamic）	mm	50
Min.Bend Radius（Static）	mm	30
Operating Temperature	- 2 0 C-+ 6 0 C	
Temperature Range	- 2 0 C-+ 6 0 C	

Fiber Attenuation

OM3-150 50/125μm Technical data

Characteristic	Condition	Data	Unit
Optical properties			
Attenuation	850nm 1300nm	≤2.5 ≤0.7	dB/km dB/km
Bandwidth	850nm 1300nm	≥700 ≥500	MHz.km MHz.km
Effective bandwidth	850nm	≥950	MHz.km
10Gb / s Ethernet link length		150	m
Numerical aperture (NA)		0.185～0.215	
The differential modulus delay DMD		850nm DMD Inner template（ps/m） （radius 5～18μm） ≤0.7	850nm DMD Inner template （ps/m） （radius 0～ 23μm） ≤0.7
Backscatter characteristics **(1300nm)**			
Partly discontinuous point		≤0.1	dB
Fiber attenuation inhomogeneity		≤0.1	dB

Bidirectional backscattering coefficient difference		≤0.1	dB/km
Geometric characteristics			
Core diameter		50±2.5	μm
Cladding roundness		≤6.0	%
Coating diameter		125±2	μm
Cladding roundness		≤2.0	%
Coating / cladding concentricity error		≤1.5	μm
Coating diameter		245±10	μm
Core / package concentricity error		≤12.0	μm
Delivery length		1.1～8.8	km/reel
Environmental characteristics（850nm And 1300nm）			
Temperature additional attenuation	-60℃ ～+85℃	≤0.15	dB/km
Flooding additional attenuation	-10℃ ～+85℃，98%Relative	≤0.20	dB/km
Hot and humid additional attenuation	23℃±2℃	≤0.20	dB/km
Dry heat aging	85℃±2℃和 85% Relative	≤0.20	dB/km
Mechanical properties	85℃±2℃	≤0.20	dB/km