

Photonix

Fiber Optic Connectivity



STANDARD FIBER OPTIC PATCH CORD

Fiber optic patch cables are ideal for supporting high speed telecommunication network fiber applications. They are manufactured and tested in compliance with TIA 604 (FOCIS), IEC 61754 and YD/T industry standards. OM1, OM2, OM3, OM4, OM5 or OS2 fiber types are available to meet the demand of Gigabit Ethernet, 10 Gigabit Ethernet and high-speed Fiber Channel. Every termination is through rigorous parameter test to ensure the highest network performance

FEATURES

- High quality zirconia ferrules.
- Good repeatability and interchangeability.
- LC, SC, ST, FC connectors are available.
- Flame-retardant, rugged and durable jacket.
- Printing helps clarify and recognize different cables.
- OS2, OM4, OM3, OM2, OM1, OM5 are available.

STANDARDS COMPLIANCE

- RoHS, ISO 9001 Compliant
- TIA 604 (FOCIS)
- TIA/EIA 492AAAE
- IEC 61754
- IEC 60793-2-10
- IEC 61300-3-35
- YD/T1272.1-2003

TECHNICAL SPECIFICATION

Physical Characteristics	Description
Connector Types End A	LC/SC/FC
Connector Types End B	LC/SC/FC
Polish Type	SMF: UPC-UPC, UPC-APC, APC-UPC, APC-APC MMF: UPC-UPC
Connector Ferrule	Zirconia Ceramic
Cable Outside Diameter	Duplex: 2.0/3.0mm Simplex: 2.0/3.0mm
Interchangeability	≤0.2dB
Vibration	≤0.2dB
Minimum Bend Radius	SMF: 10mm/30mm MMF: 7.5mm/15mm

MECHANICAL CHARACTERISTICS	Description
Fiber Type	SMF: OS2(G.6577A2) MMF: OM4/OM3/OM2
Fiber Count	Duplex /Simplex
Cable Jacket	PVC(Riser/OFNR)/LSZH/Plenum (OFNP)
Jacket Color	OM2: Orange OM3: Aqua OM4: Violet OS2: Yellow
Fiber Grade	SMF: G.657.A2 OM4/OM3/OM2



OM2



OM3



OM4

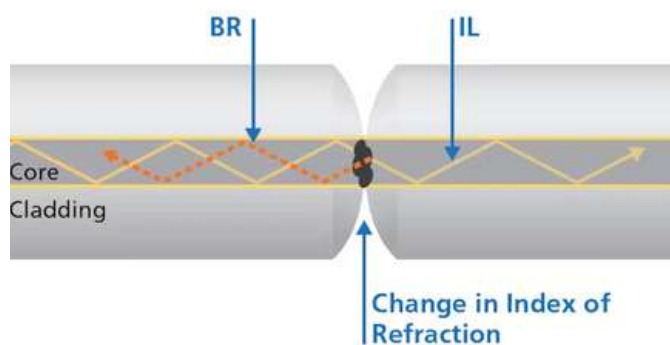


OS2

TECHNICAL SPECIFICATION

Optical Characteristics	Description
Connector Insertion Loss	LC/SC/FC≤0.3dB
Connector Return Loss	SMF: UPC≥50, APC≥60 MMF: UPC≥30
Attenuation at 1310nm	0.36dB/km
Attenuation at 1550nm	0.22dB/km
Attenuation at 850nm	3.0dB/km
Attenuation at 1300nm	1.0dB/km

Environmental Characteristics	Description
Operating Temperature	-20~70°C
Storage Temperature	-40~80°C



TRANSMISSION DISTANCE COMPARISON

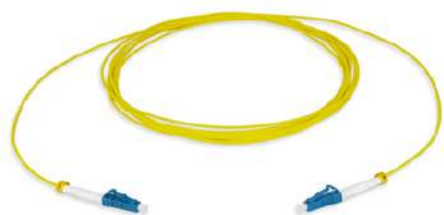
Data Rate	Interface Type	Data Rate	Data Rate	Maximum Distance
1G	1000BASE-LX	OM4 OM3 OM2 SMF	1300nm 1300nm 1300nm 1310nm	550m 550m 550m 10km
	1000BASE-SX	OM4 OM3 OM2	850nm 850nm 850nm	550m 550m 550m
10G	10GBASE-SR	OM4 OM3 OM2	850nm 850nm 850nm	400m 300m 82m
	10GBASE-LRM	OM3 OM2	1300nm 1300nm	220m 220m
	10GBASE-LR	SMF	1310nm	10km
	10GBASE-ER	SMF	1550nm	30-40km
	10GBASE-ZR	SMF	1550nm	80-100km
40G	40G-BIDI	OM4 OM3	850nm 850nm	150m 100m

TRANSMISSION DISTANCE COMPARISON

Data Rate	Interface Type	Data Rate	Data Rate	Maximum Distance
40G	40GBASE-SR4	OM4 OM3	850nm 850nm	350m 240m
	40G-SWDM4	OM4 OM3	850nm 850nm	350m 240m
	40GBASE-LR4	SMF	1310nm	10km
100G	100GBASE-SR4	OM4 OM3	850nm 850nm	300m 82m
	100G-SWDM4	OM4 OM3	850nm 850nm	220m 220m
	100GBASE-SR10	OM4 OM3	850nm 850nm	125m 100m
	100GBASE-LR4	SMF	1310nm	10km
	100GBASE-LR4	SMF	1310nm	40km

FIBER OPTIC CONNECTORS GUIDANCE

LC



Long Form

- Lucent Connector/Little Connector/Local Connector

Typical Applications

- High-density connections, SFP and SFP+ transceivers, XFP transceivers

SC



Long Form

- Subscriber Connector/Square Connector/Standard Connector

Typical Applications

- Datacom and telecom; GPON; EPON; GBIC

FC



Long Form

- Ferrule Connector or Fiber Channel

Typical Applications

- Datacom, telecom, measurement equipment, single mode lasers

TEST CENTER

Comprehensive performance testing system ensures more secure operation and keeps more stable and reliable data connection. The IL & RL of fiber optic patch cables are tested to ensure stable network performance. Clean optical connectors are paramount in providing a reliable, high-performance fiber optic infrastructure.

PROFESSIONAL TEST EQUIPMENT



Insertion and Return loss testing



End face inspection



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