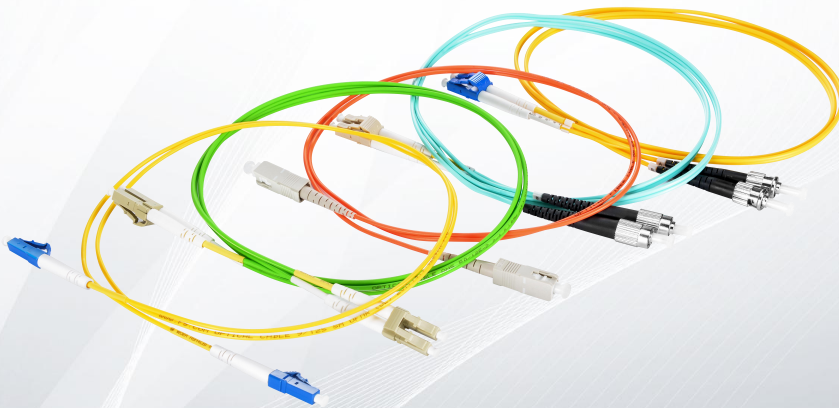


Standard Fiber Patch Cables Datasheet

MAKE HIGH-SPEED ETHERNET NETWORK EQUIPMENT CONNECTIONS

Designed for data center, enterprise, FTTx, LAN and WAN, CATV network, telecom network applications etc. requiring quick infrastructure deployment such as main, horizontal, and zone distribution areas.



Standard Fiber Patch Cables

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.

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

Features

- High quality zirconia ferrules.
- Good repeatability and interchangeability.
- LC, SC, ST, FC, LSH, MTRJ, MU connectors are available.
- Flame-retardant, rugged and durable jacket.
- Printing helps clarify and recognize different cables.
- OS2, OM4, OM3, OM2, OM1, OM5 are available.
- Factory terminated and tested for insertion loss, return loss and end face.

Technical Specification

Physical Characteristics	Description
Connector Types End A	LC/SC/ST/FC/LSH/MTRJ/MU
Connector Types End B	LC/SC/ST/FC/LSH/MTRJ/MU
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: 0.9/2.0/3.0mm
Interchangeability	≤0.2dB
Vibration	≤0.2dB
Minimum Bend Radius	SMF: 10mm/30mm; MMF: 7.5mm/15mm

Mechanical Characteristics	Description
Fiber Type	OS2/OM5/OM4/OM3/OM2/OM1
Fiber Count	Duplex/Simplex
Cable Jacket	PVC (Riser/OFNR)/LSZH/Plenum (OFNP)
Jacket Color	OM1/OM2: Orange; OM3/OM4: Aqua; OM5: Lime Green; OS2: Yellow
Fiber Grade	SMF: G.657.A1; OM5/OM4/OM3/OM2: Bend Insensitive; OM1: G.651

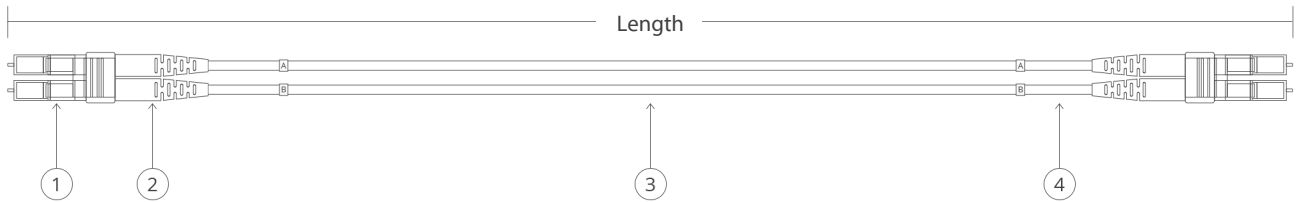
Tensile Strength (Long Term/Short Term)	Duplex	Simplex
3.0mm OD	120N/225N	80N/150N
2.0mm OD	90N/150N	60N/100N
0.9mm OD	--	3N/6N

Optical Characteristics	Description
Connector Insertion Loss	LC/SC/ST/FC/LSH/MU/MTRJ \leq 0.3dB
Connector Return Loss	SMF: UPC \geq 50, APC \geq 60 (LC/SC/ST/FC/MU/MTRJ), UPC \geq 55, APC \geq 75 (LSH) MMF: UPC \geq 30 (LC/SC/ST/FC/LSH/MU), UPC \geq 35 (MTRJ)
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	Fiber Mode	Wavelength	Maximum Distance
1G	1000BASE-LX	OM5	850nm	550m
		OM4	1300nm	550m
		OM3	1300nm	550m
		OM2	1300nm	550m
		OM1	1300nm	550m
		SMF	1310nm	10km
	1000BASE-SX	OM4	850nm	550m
		OM3	850nm	550m
		OM2	850nm	550m
		OM1	850nm	275m
10G	10GBASE-SR	OM4	850nm	400m
		OM3	850nm	300m
		OM2	850nm	82m
		OM1	850nm	33m
	10GBASE-LRM	OM5	850nm	220m
		OM3	1300nm	220m
		OM2	1300nm	220m
		OM1	1300nm	220m
	10GBASE-LR	SMF	1310nm	10km
	10GBASE-ER	SMF	1550nm	30-40km
10GBASE-ZR	SMF	1550nm	80-100km	
40G	40G-BIDI	OM5	850nm	200m
		OM4	850nm	150m
		OM3	850nm	100m
	40GBASE-SR4	OM5	850nm	150m
		OM4	850nm	150m
		OM3	850nm	100m
	40G-SWDM4	OM5	850nm	440m
		OM4	850nm	350m
		OM3	850nm	240m
	40GBASE-LR4	SMF	1310nm	10km
100G	100GBASE-SR4	OM5	850nm	100m
		OM4	850nm	100m
		OM3	850nm	70m
	100G-SWDM4	OM5	850nm	150m
		OM4	850nm	100m
		OM3	850nm	75m
	100GBASE-SR10	OM4	850nm	125m
		OM3	850nm	100m
	100GBASE-LR4	SMF	1310nm	10km
	100GBASE-ER4	SMF	1310nm	40km

Technical Drawing



① LC Connector

② Connector Boot

③ Cable Jacket 2.0mm OD

④ Heat Shrink Tub

* The total length of this cable is the distance from the connector ferrule at one end to the ferrule at the other end.

Cable Length Tolerances

Cable Length	Duplex/Simplex	Multifiber
$L \leq 0.5m$	+5cm/-0cm	+8cm/-0cm
$0.5m < L \leq 5m$	+10cm/-0cm	+12cm/-0cm
$5m < L \leq 10m$	+15cm/-0cm	+15cm/-0cm
$10m < L \leq 30m$	+20cm/-0cm	+20cm/-0cm
$30m < L \leq 100$	+1%/-0cm	+1%/-0cm
$L > 100m$	+1.5%/-0cm	+1.5%/-0cm

Optic Fiber Connectors Guidance

1. LC



Long Form

- Lucent Connector/Little Connector/Local Connector

Typical Applications

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

2. SC



Long Form

- Subscriber Connector/Square Connector/Standard Connector

Typical Applications

- Datacom and telecom; GPON; EPON; GBIC

3. FC



Long Form

- Ferrule Connector or Fiber Channel

Typical Applications

- Datacom, telecom, measurement equipment, single mode lasers

4. ST



Long Form

- Straight Tip

Typical Applications

- Datacom

5. LSH



Typical Applications

- Telecom, DWDM systems

6. MU



Long Form

- Miniature Unit

Typical Applications

- LANs and telecommunication networks

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



Test Assured Program



Insertion Loss Testing



Return Loss Testing



End-Face Inspection

Hot Products

ID	Description
#40191	1m (3ft) LC UPC to LC UPC Duplex OS2 Single Mode PVC (OFNR) 2.0mm
#40214	1m (3ft) LC UPC to SC UPC Duplex OS2 Single Mode PVC (OFNR) 2.0mm
#41918	1m (3ft) LC UPC to LC UPC Duplex OM2 Multimode PVC (OFNR) 2.0mm
#40446	1m (3ft) LC UPC to LC UPC Simplex OS2 Single Mode PVC (OFNR) 2.0mm
#43134	1m (3ft) LC UPC to LC UPC Duplex OM2 Multimode PVC (OFNR) 2.0mm
#40180	1m (3ft) LC UPC to LC UPC Duplex OM4 Multimode PVC (OFNR) 2.0mm
#41730	1m (3ft) LC UPC to LC UPC Duplex OM3 Multimode PVC (OFNR) 2.0mm