

PATCH CORDS







INTRODUCTION:

Fiber connectors are the elements that allow the mechanical connection of optical fibers.

These can be applied to all types of fibers, according to each need.

FOCIS (Fiber Optic Connector Intermateability Standards) is the interconnectivity standard for these connectors, which manufacturers must follow to ensure full compatibility with other connectors of the same type.

Fiber optic patch cables are designed for ODF interconnections and high-speed communications equipment.

They are manufactured and tested in compliance with TIA 604 (FOCIS), IEC 61754 and industry standards YD /

T. OM1, OM2, OM3, OM4, to meet the demand for 1, 10 and 40 Gigabit transmissions, in Ethernet channels and Fiber high speed.

Each end of patch cables is tested to rigorous standards to ensure the best network performance.

CHARACTERISTICS

High quality zirconia splints.

Good repeatability and exchange.

Fire retardant, robust and durable jacket.

Factory terminated and tested for insertion loss, return loss, and tip finish.

Available in standard connectors LC, SC, ST, FC.

Singlemode (OS2) and multimode (OM1, OM2, OM3, OM4).

APPLICATIONS

Data center.

Company.

Fiber to the X (FTTX).

Local area network and wide area network (LAN and WAN).

Community Antenna Television Network (CATV Network).

Telecommunications network.







PATCH CORD CERTIFICATION

VISUAL VERIFICATION OF LOSSES IN POLISHING



TEST REPORT



LOSS MEASUREMENT







COMPLIANCE WITH STANDARDS

TIA 604 (FOCIS) TIA/EIA 492AAAE IEC 61754 IEC 60793-2-10 IEC61300-3-35 YD/T1272.1-2003 RoHS, ISO9001 Compliant



YO.Mechanical Characteristics

Fiber Type Amount of Fibers OS2/OM4/OM3/OM2/OM1

Cable cover Simplex/Duplex

Sheath Color Yellow PVC (Riser/OFNR) / LSZH

Fiber Grade OM1/OM2: Orange; OM3: Aqua; OM4: Magenta; OS2: Singlemode:

G.652.D

Optical Characteristics

Insertion connector loss Singlemode: LC/SC/ST/FC ≤0.3dB

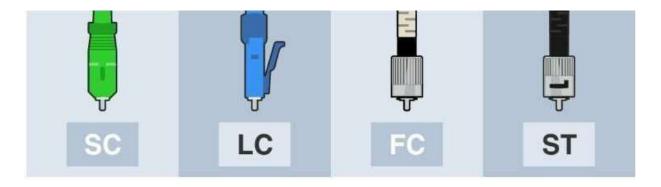
Multimode: LC/SC/ST/FC ≤0.3dB;

Lost Return Connector Single mode: UPC≥50dB; APC≥60dB; Multimode: ≥20dB

Attenuation at 1310nm 0.36dB/km Attenuation at 850nm 3.0 dB/km Attenuation at 1300nm 1.0dB/km

Environmental Characteristics

Operation Temperature 40~75°C OS2/OM4/OM3/OM2/OM1: -









Patch Cord Options

- **Simple**xin single mode LC, SC, FC, widely used in Telecom, FTTx, GPON.
- **Duplex**in different termination options: LC, SC, FC, ST
- Loopback(test duplex connector), can be SC or LC.
- **Fan-out**(trunk), multi-fiber in a single 8, 12, 24 or 48 fiber cable, upon request.

• Uniboot(uniboot) applicable only for LC Duplex, duplex fiber in circular Simplex jacket, reduces up to 60% space for cable management in panels and high-density fiber port trays (Data Center, main cabinets, fiber optic headends).





Connector Type	SC, FC, LC, ST, E2000		
Polishing Type	MM/UPC	SM/UPC	SM/APC
Insertion Loss (IL)	≤0.30dB	≤0.30dB	≤0.30dB
Return Loss (RL)	≥35dB	≥50dB	≥60dB
tensile strength	> 70N		
Tensile strength (cable)	> 150N		
Breaking Traction (rope)	> 200N		
Crushing load (rope)	> 500N		
Durability	> 500 cycles		
Minimum radius of curvature	10 times the diameter of the		
	cable		
Storage and operating temperature	between -40°C and +85°C		



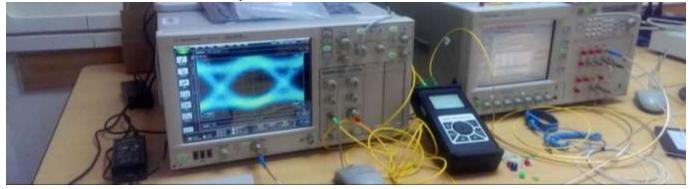




Optical Specifications

		Polished APC	Polished UPC
Radio of curvature	SC/FC/ST	5 - 12mm	10 - 25mm
	LC	5 - 15mm	7 - 25mm
Apex Offset			≤50um
Fiber Spherical Height		±100nm	±50nm
Angular Offset		8* ± 0,2*	

Geometric Specifications













Standards and Requirements.

	Standards	
Compliance		
NO.	Standard and Requirements	
1	ROHS 2011/65/EU and its subsequent amendments (EU) 2015/863	
2	Certification in ISO 9001:2015	
	by certification system SGS	
3	IEC 62321-8:2017 standard	
	Dibutyl Phthalate (DBP) according to Laboratio DYS FIBER OPTIC LIMITED	
4	IEC 62321-8-2017 standard	
	Benzylbutyl Phthalate (BBP) according to DYS FIBER OPTIC LIMITED laboratory	
5	Standard IEC-62321-8:2017	
	Di-(2-ethylhexyl Phthalate(DEHP)) according to laboratory DYS FIBER OPTIC LIMITED	
6	Standard IEC-62321-8:2017	
	Diisobutyl Phthlate (DIBP) according to DYS FIBER OPTIC LIMITED laboratory	
7	Standard IEC62321-5:2013	
	Pb test according to DYS FIBER OPTIC LIMITED laboratory	
8	Standard IEC62321-4:2013/AMD1:2015	
	Cd test according to laboratory DYS FIBER OPTIC LIMITED	
9	Standard IEC62321-7-1:2015	
	Cr(VI)(Metal) test according to DYS FIBER OPTIC LIMITED laboratory	
10	Standard IEC62321-7-2:2017	
	Cr(VI)(Nonmetal) test according to DYS FIBER OPTIC LIMITED laboratory	
11	Standard IEC62321-6:2015	
	PBBs test according to laboratory DYS FIBER OPTIC LIMITED	

