

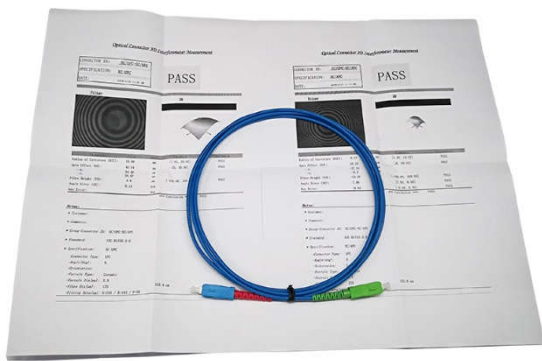
Sales Catalog of HNK Telecommunication Products
Fiber Optic Patch Cord

Test Standard Fiber Optic Patch Cord

The test standard fiber optic patch cord is used to test the optical performance of other fiber optic patch cords. Fiber optic patch cord consists of two parts: the optical cable and the connector. After connectors are added to an optical cable, optical loss includes the loss of the fiber in the optical cable and the loss of the connectors. On very short cable assemblies (up to 10 meters long), the loss of the connectors will be the only relevant loss, while fiber will contribute to the overall losses in longer cable assemblies. Obviously, all test standard fiber optic patch cords used for testing must have high quality connectors to get reliable test results.



Using interferometer helps guarantee optical performance by providing consistent quality control of the polishing process. The interferometer tests several components of the connector. The three major measurements are the radius of curvature, apex offset and fiber height. Based on these three parameters, to make the connection between the end face of connectors reach the high precision.



Features

- 100% tested on optical performance (Insertion Loss & Return Loss).
- 100% 3D test past, more than IEC standard.
- High concentricity wear-resistant Ceramic Ferrule.
- All patch cords are extruded from high quality Corning glass and DuPont yarn.
- All connectors are polished by automated machinery to ensure consistent performance.
- The surface of the connector in 3D images and generate the data and report automatically.

3D Interferometer Measurement Standard

Polish	UPC		APC	
	SC, FC, ST	LC	SC, FC	LC
Connector Type	SC, FC, ST	LC	SC, FC	LC
Mode	SM/MM	SM/MM	SM	SM
Angle Error (°)	0±0.2		8±0.2	
Radius of Curvature (mm)	10-25	7-20	5-12	
Apex Offset (µm)	≤50		≤30	
Fiber Undercut X(µm)	≤50			
Fiber Protrusion Y(µm)	≤50			
Fiber Height (nm)	±50			
Durability	500 cycles (0.1 dB max increase), 1000 mate/demate cycles			



Sales Catalog of HNK Telecommunication Products

Fiber Optic Patch Cord

Connector Data

Connector Type	SC/FC/ST	LC
Connector Ferrule	Ceramic	
Ferrule Diameter (mm)	2.4990±0.0003	1.2490±0.0003
Concentricity Error (µm)	< 0.3	
Angular Alignment Error (°)	0.2	
Operating Temperature	-40°C to +85°C	

Optical Performance Data

Connector Type	FC, SC, LC, ST		
Mode	SM		MM
Polish	UPC	APC	UPC
Insert Loss (dB)	≤0.1	≤0.15	≤0.1
Return Loss (dB)	≥50	≥60	≥35

Ordering Information

Using the available configurations amend/create product codes using the formula below.

Part Number: **TSPC-AA-BB-CDEFGCL**

Ordering Guide

AA	BB	C	D	E	F	G	CL
Connector Type	Connector Type	Fiber Type (Corning)	Fiber Count	Boot fit for cable diameter	Length	Jacket Material	Jacket Color(CL)
FP, SP, SA, LP	FP, SP, SA, LP	OM1=62.5/125 OM1 OM2=50/125 OM2 OM3=50/125 OM3 OM4=50/125 OM4 G652D=9/125 G652D G657A=9/125 G657A	SX=Simplex DX=Duplex	30=3.0mm	015=1.5M 050=5M 100=10M	1=PVC 2=LSZH	As noted in Color code chart

Connector Type Code

Code	Connector	Code	Connector	Code	Connector	Code	Connector
FP	FC/UPC	FA	FC/APC	LP	LC/UPC	LA	LC/APC
SP	SC/UPC	SA	SC/APC	TP	ST/UPC	TA	ST/APC

Color Code

BL - Blue	OR - Orange	GR - Green	BR - Brown
GY - Gray	WH - White	RE - Red	BK - Black
YE - Yellow	PU - Purple	PI - Pink	AQ - Aqua

Note: Blue Jacket for SM (other colors may be available upon request).

Ordering Sample

Part Number	Description
TSPC-SP-LA-G652DSX300301BL	SC/UPC-LC/APC Test Standard Fiber Optic Patch Cord, Corning Singlemode G652D, Simplex, 3.0mm, PVC, Blue, 3M.