

Fiber Optic Cable Assemblies

1.2 mm Cable Patch Cords



1.2 mm SC Patch Cord



1.2 mm LC Patch Cord

Today's networks are utilizing more and more fiber. This ever expanding growth of fiber in the network is straining the capacity of vertical and horizontal fiber management systems used in the network today. To help solve the cable congestion issues seen in networks around the world, TE Connectivity (TE) is introducing the revolutionary 1.2 mm cable patch cords. Available with LC or SC connectors, TE's new 1.2 mm patch cords require half the space of traditional 1.6 mm patch cords and a third of the space of traditional 2.0 mm patch cords.¹

In environments where space constraints and cable routing prove most challenging, the 1.2 mm patch cords offer the necessary flexibility and quality to realize significant labor and cost savings for service providers.

FEATURES

- UPC/SC, APC/SC, UPC/LC and APC/LC connector versions
- Reduced Bend Radius fiber
- OFNP cable
- Compatible with industry standard fiber cable and SC and LC connectors

APPLICATIONS

- Carrier networks
- Head Ends
- Private networks
- Data Centers
- Equipment distribution areas
- Equipment test areas
- Cross-connect applications
- Transmission systems
- Storage systems
- Switching systems
- DWDM systems

¹Based on Telcordia GR-449-CORE cable packing density guidelines.

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STANDARDS AND SPECIFICATIONS

The 1.2 mm fiber optic cable assembly is designed to meet Telcordia GR409 requirements for small form factor cables, and GR-326 CORE mechanical and performance requirements. Designed to meet the intermateability requirements of IEC 61754-4 and TIA-604-3-B. Examples of tests performed are provided below:

Temperature shock
Humidity
Temperature life
Mating durability
Vibration

Cable Flex
Cable retention
Cable twist
Impact
Reliability/Extended environmental



1.2 mm SC Connector



1.2 mm LC Connector

- Reduced Bend Radius fiber allows routing in electronic equipment cabinets or bays that commonly provide minimal cable management features
- 1.2 mm diameter cable provides a 65% space savings over commonly used 2.0 mm cable (see table below)
- High quality connectors

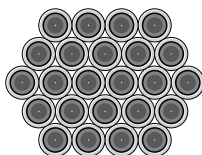
OPTICAL

Maximum IL	Minimum RL	Fiber Height *	Apex Offset	Radius
UPC: 0.4dB APC: 0.4dB	UPC: -55dB APC: -65dB	UPC: -125 to +50 nm APC: -100 to +100 nm	UPC: 50 µm max APC: 60 µm max	UPC/SC: 10-25 mm; UPC/LC: 7-25 mm APC: 5-12 mm

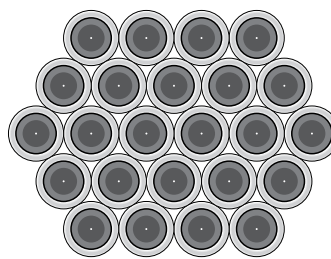
*Variations depending on radius, per GR326 recess equation for UPC and IEC 61755-3-2 for APC.

Patch Cord Diameter	Cables per Square * Inch of Vertical Cable Management Space
3.0 mm	46
2.0 mm	102
1.6 mm	142
1.2 mm	285

*Based on GR-449-CORE, Issue 2 patch cord packing density guidelines.



24-Fiber Bundle
1.2 Diameter Cable



24-Fiber Bundle
2.0 Diameter Cable

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The 1.2 mm cable with SC or LC connector is a new fiber optic cable technology with a look-and-feel uniquely different than standard fiber cable. Despite the small diameter, performance is similar to a 1.6 mm or 2.0 mm cable. This is due to the cabling design, which features a proprietary method of bonding the jacket to the cable strength members. The result is a cable assembly with improved capability over standard 1.6 mm or 2.0 mm cable, where pull forces on the cable are distributed to the strength members, as opposed to the cable jacket which can be potentially damaged.

ORDERING INFORMATION

Product Description	Catalog Number**
Singlemode, ONFP jacket; 1.2 mm fiber jumper	
SC/UPC - SC/UPC	FPCA-77YPxxxM
SC/UPC - SC/APC	FPCA-7EYPxxxM
SC/APC - SC/APC	FPCA-EEYPxxxM
LC/UPC - LC/UPC	FPCA-KKYPxxxM
LC/UPC - LC/APC	FPCA-KMYPxxxM
LC/APC - LC/APC	FPCA-MMYPxxxM
SC/UPC - LC/UPC	FPCA-7KYPxxxM
SC/UPC - LC/APC	FPCA-7MYPxxxM
SC/APC - LC/UPC	FPCA-EKYPxxxM
SC/APC - LC/APC	FPCA-EMYPxxxM

**X = length in meters: 001=1 m, 002=2 m, 003=3 m, 005=5 m, 006=6 m, 007=7 m, 010=10 m, 015=15 m
Contact TE's Technical Assistance Center for availability of custom lengths.

PRODUCT DIMENSIONS

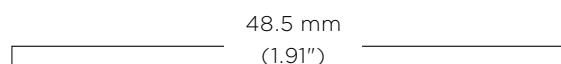
Patch Cords



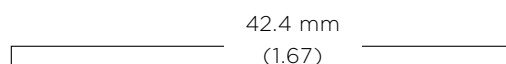
Assembly length

Length	Tolerance
1 to 15 m	+16 cm/-0 cm
+15 m	+1%/-0 cm

Connector Dimensions



SC 1.2 mm Connector



LC 1.2 mm Connector

DATA SHEET

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