

Article Overview

A PC fiber optic patch cord is a fiber cable with Physical Contact (PC) connectors on both ends, designed for low-loss, short-distance optical connections in networks and lab setups.

Overview

A PC (Physical Contact) fiber optic patch cord is a type of fiber optic cable terminated with connectors that have a slightly curved end-face, ensuring the fiber cores make direct contact when mated. This design minimizes back reflection and insertion loss, making it suitable for high-performance optical networks . PC patch cords are commonly used in single-mode and multimode networks, connecting switches, routers, transceivers, patch panels, and test equipment .

Connector Types

PC patch cords are available with various connector types, including:

- o FC/PC: Threaded connectors ideal for lab and measurement applications .
- o LC/PC, SC/PC, ST/PC: Widely used in data centers and enterprise networks .
- o MPO/MTP: Multi-fiber connectors for high-density applications . Each connector type has specific applications depending on equipment compatibility and network design.

Fiber Modes and Jacket Options

- o Single-mode (SM): Optimized for long-distance, high-bandwidth transmission.
- o Multimode (MM): Suitable for shorter distances, such as intra-rack or inter-rack connections . Patch cords come with different jacket materials and diameters, such as 3 mm PVC or 900 um Hytrel(R) furcation tubing, which affect flexibility and compatibility with cable management systems .

Applications

PC fiber optic patch cords are used in:

- o Data centers: Connecting servers to top-of-rack switches or patch panels .
- o Telecommunications: Linking network devices and fiber transceivers .
- o Laboratory and test setups: Connecting OTDRs, power meters, and light sources .
- o FTTH and building entry: Indoor-outdoor transition cables connecting outside plant to customer premises .

Performance Considerations



PC fiber optic patch cord

When selecting a PC patch cord, consider:

- o Insertion loss and return loss: PC connectors typically offer low back reflection (~-40 dB) suitable for most applications .
- o Durability: High-quality cords withstand thousands of mating cycles.
- o Custom options: Some manufacturers provide custom lengths, jacket colors, and AR-coated ends for specialized applications . PC patch cords are a reliable choice for standard optical connections, while APC (Angled Physical Contact) connectors are preferred in applications requiring even lower back reflection, such as analog video or high-precision measurement systems.

Fiber patch cords are one of the most widely used basic components in optical communications. UnitekFiber supplies

Fiber Optic SC/APC-SC/APC singlemode simplex 3.0mm patchcord LSZH outer sheath Fiber optic patch cord is available in both

All patch cords are manually tested and verified and each patch cable is individually sealed and labeled with measured optical

Learn about SC, LC, FC, and ST fiber optic patch cords, their uses in FTTH, telecom, and data centers, and how to

Fiber patch cables are a protected and connectorized fiber-optic cable, mostly used for short-distance

Learn how to distinguish between PC, APC, and UPC ferrules in fiber optic patch cords. Our guide explains how to

Explore fiber optic patch cords for telecom, data centers, and FTTH. From LC/SC to MPO/MTP and armored jumpers,

FLYPROFiber- 6 Pack 2M LC to LC Single Mode Fiber Patch Cable OS2, SM Fiber Optic Cable, SMF Singlemode Fiber Jumper

0.2M (7inch), OM3 LC-LC Fiber Optic Patch Cable Multimode 10Gb is designed for high density

High Quality Fiber Patchcords are ideal for UV-VIS (190 - 1250nm) or VIS-NIR (300 - 2400nm) ranges with various core sizes

PC fiber optic patch cord

In the webshop, you will find our fibre optic patchcords with singlemode and multimode OM3 and OM4 fibres in FRNC-LSZH indoor

Fiber Optic Patch Cable Types There are different types of fiber optic patch cord according

Fiber Patch Cables are commonly used with patch panels, optical switches, and/or telco equipment. There are different types of fiber

Thorlabs offers single mode patch cables with FC/PC connectors on both ends. Each cable is

Product information "Fiber optic patch cord duplex multimode OM3, LC-PC/LC-PC, I-V (ZN)H 2x 2,1 mm" Fiber Optic Patch Cords

DESCRIPTIONS Fiber optic patch cord is also called fiber optic connector. It is dismountable, flexible and featured with small size,

Web: <https://in-au.co.za>

