



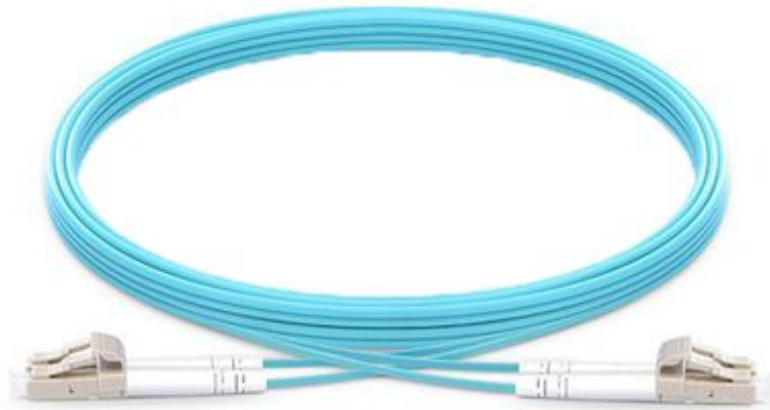
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Fiber Optic Patch Cable



Fiber Optic patch cables, also referred to as jumper cables, are used to connect devices together that are in short proximity of each other. The ends fiber patch cables are terminated to reduce installation time in the field and ensure a high-quality product. Choose below from one of our varieties of fiber optic cables for sale, or, scroll down for more information!



LC - UPC - Duplex

The Lucent Connector, named after its inventor is the most common fiber patch cable connector currently in use. It is designed for compatibility with Small Form-Factor Pluggable Transceivers (SFP) in high density connections. This is a duplex-single fiber connector, that is designed for fixing into a Duplex Transceiver and has a locking mechanism at the top of the connector. The Ferrule is Ceramic and has a diameter of 1.25mm. Since the foot print of this connector is about half that of its predecessor (SC), it has become very popular in high density data patch applications. This duplex application is common since most fiber patch connections must be able to communicate both ways, on separate channels.

This is also classified as by its "ferrule polish" an Ultra Physical Contact (UPC) Connector. This is identified by Blue for SM and Grey for MM and is regarding the connection point/shape of the ferrule tip. The tip is convex and an extended polishing method before attachment. The ends butt up against one another on a perpendicular plane. The main issue with the design is the tendency for back reflection with poor cleaving and repeat matings.

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MTP Connector



MTP is the Multifiber Connector that is commonly used in prefabrication plants, or for ribbon cables. The polymer ferrule can support 24 fibers in a single ferrule. Multifiber connectors are not currently designed for field fit applications, so these are mainly used for lab termination. In high density data centers they are used extensively, in SM and MM wavelength applications. It features a pull tab locking mechanism, and can only be plugged into the opposing connector. In data centers this is commonly used in break-out cable applications with several single fiber connector types connected to this one multi fiber connector for easy repatching.



LC - UPC - Simplex

The Lucent Connector, named after its inventor is the most common fiber patch cable connector currently in use. It is designed for compatibility with Small Form-Factor Pluggable Transceivers (SFP) in high density connections. This is a single fiber connector, that is designed for fixing into a Simplex Transceiver and has a locking mechanism at the top of the connector. The Ferrule is Ceramic and has a diameter of 1.25mm. Since the foot print of this connector is about half that of its predecessor (SC), it has become very popular in high density data patch applications.

This is also classified by its "ferrule polish" as an Ultra Physical Contact (UPC) Connector. This is identified by Blue for SM and "Grey" for MM and is regarding the connection point/shape of the ferrule tip. The tip is convex and an extended polishing method before attachment. The ends butt up against one another on a perpendicular plane. The main issue with the design is the tendency for back reflection with poor cleaving and repeat matings

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SC - UPC - Duplex

Referred to as the "square connector", the SC has a push-pull coupling lock with a spring loaded ferrule. It was standardized into the telecom specs TIA-568-A and slowly grew in popularity because of its excellent performance. It is commonly used datacom/telecom point to point communication.

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OM3 Fiber

The third type of multimode fiber cable, identified by an aqua blue jacket per industry standards, has a core size of 50µm. It is designed for Laser transmission in order to support 10G, 40G and 100G Ethernet Speeds. OM3 and OM4 are the current industry standard, but are quickly being outdated by the new OM5 fiber for its SWDM capabilities. An inconvenience of this cable is there is no easy identifier between OM3 and OM4 fiber.



OM4 Fiber

The fourth type of multimode fiber cable, identified by an aqua blue jacket per industry standards, has a core size of 50µm. It is designed for Laser transmission in order to support 10G, 40G and 100G Ethernet Speeds. OM3 and OM4 are the current industry standard, but are quickly being outdated by the new OM5 fiber for its SWDM capabilities. An inconvenience of this cable is there is no easy identifier between OM3 and OM4 fiber.



OS 2 Single Mode Fiber

The second designation for single mode fiber, which is only compliant with ITU-T G.652C/D. OS2 is constructed with loose tube design, commonly used in street, underground burial, outdoor applications, etc. The maximum attenuation is 0.4db/km and maximum speed is 10Gb. Due to the fact OS2 can transmit farther than OM1(10), it is generally more expensive than OM1.

Subcategories

Single Mode Fiber Patch Cables



Singlemode Fiber has a higher attenuation than Multimode, however the bandwidth and length capabilities are much higher. Our Singlemode Fiber comes in a duplex form, which allows two lanes of communications for each direction in patch applications. All of our SM Fiber has a G.657.A1 Grade (bend-insensitive fiber) which allows for lower bend radius without compromising signal. This is done by surrounding the core with an optical trench that reflects stray light back into the core. Singlemode fiber utilizes Multiplexing or MUX/DEMUX technology which allows for increased data transmission through the use of one fiber strand.

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Multimode Fiber Patch Cables



Multimode Fiber has a larger core size than Singlemode Fiber, and is designed for multiple modes of light independently transmitting data along their respective channels. Multimode Fiber has lower bandwidth and attenuation than SM. It is typically used in LAN setting and is easy to install and has low power consumption. MM is commonly used for up to 10G/core, in applications where more data transmission is needed the user would use multiple modes of light. The

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