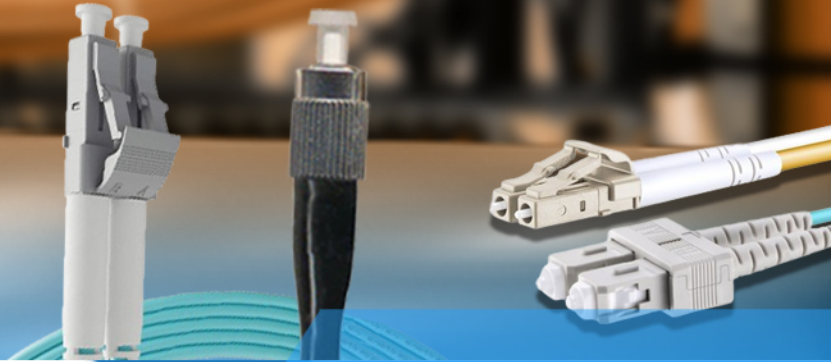
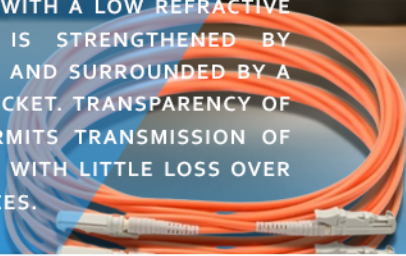


## FIBER OPTIC

# FIBER OPTIC PATCH CORD

IS CONSTRUCTED FROM A CORE WITH A HIGH REFRACTIVE INDEX, SURROUNDED BY A COATING WITH A LOW REFRACTIVE INDEX, THAT IS STRENGTHENED BY ARAMID YARNS AND SURROUNDED BY A PROTECTIVE JACKET. TRANSPARENCY OF THE CORE PERMITS TRANSMISSION OF OPTIC SIGNALS WITH LITTLE LOSS OVER GREAT DISTANCES.



## PATCH CORD LC-LC MULTI MODE OM2 DX 1M

NS-LCUPC-LCUPC-DX-OM2-1M

### DESCRIPTION

#### Multimode 50/125- $\mu$ m Optical Fiber Patch Cords:

- Multimode fiber is available in two sizes, either 50/125 or 62.5/125  $\mu$ m and a cladding diameter of 125  $\mu$ m.
- Multi-mode fiber patch cable is composed of a fiber optic cable terminated with multimode fiber optic connectors at both ends.
- It can transmit multiple light modes.
- It is mainly used for short-distance transmissions such as buildings or campuses.
- At present, there are 5 kinds of multi-mode fiber patchcord: OM1 patchcord, OM2 patchcord, OM3 patchcord, OM4 patch cord & OM5 patchcord.
- The letters "OM" stand for optical multimode.

### FEATURES

- Duplex and simplex versions.
- Uniform and hybrid cord versions.
- 100% factory transmission tested per ANSI/TIA-568-C.3.
- Cordage color coding per ANSI/TIA-598-C.

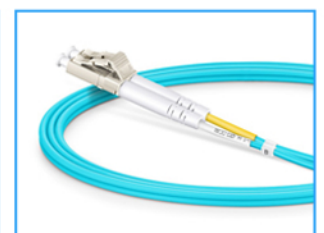
- Plastic body color coding per ANSI/TIA-598-C.3.
- Position A/Position B markings.
- Slim-profile boots with durable flexible cable strain relief.
- Comply with RoHS.
- Available Cable Diameters: 3mm, 2mm, 1.6mm 0.9mm, 250 $\mu$ m.
- Fiber Type: Corning SMF28 or Better.

### TRANSMISSION PERFORMANCE

- ANSI/TIA/EIA-568-C.3: insertion and return loss (100% tested)

### TRANSMISSION MEDIA

- 50/125- $\mu$ m multimode (OM2) optical fiber.



# TECHNICAL SPECIFICATION

## CONNECTOR TYPES

- Connector type: ST/SC/LC PC multimode FOCIS (ANSI/TIA/EIA-604) compliant.

## MECHANICAL

- Connector ferrule: ceramic.
- End-face radius of curvature: 10 mm. (0.39 in) < R < 30 mm (1.18 in).
- Apex offset: < 50 µm.
- Cable material: PVC OFNR.
- Cable jacket color: orange, aqua.

## ENVIRONMENTAL

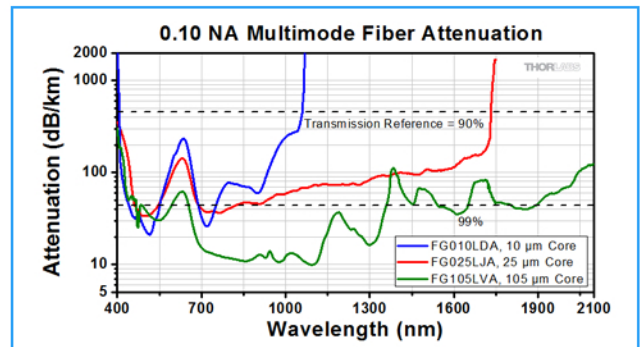
- Operation temperature: -20 °C to +70 °C (-4 °F to +158 °F).
- Storage temperature: -40 °C to +80 °C (-40 °F to +176 °F)
- Humidity: 95 % RH (non-condensing).

## TRANSMISSION PERFORMANCE

- Bandwidth: 850 nm: 500 MHz-km.
- 1300 nm: 500 MHz-km.
- Return loss: PC ≤ -30 dB.
- Insertion loss: ST, SC, LC: typical - 0.2 dB, max - 0.3 dB.
- MT-RJ: typical - 0.3 dB, max - 0.5 dB.

## COMPLIANCE

- ANSI/TIA-568-C.3, ISO/IEC 11801 2nd Ed., CENELEC EN 50173, UL94V-0

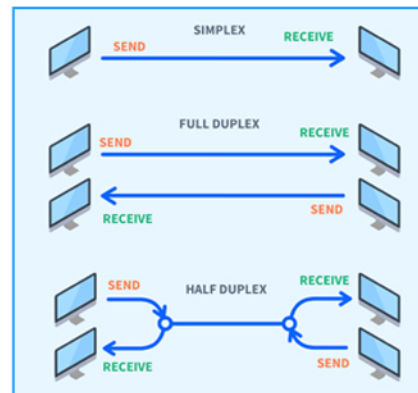


## CONSTRUCTION

- Simplex or duplex fiber cordage.
- Thermoplastic outer jacket (OFNR-rated)
- Thermoplastic strain relief

## SIMPLEX VS DUPLEX

	Simplex	Duplex
Direction of communication	Simplex communications are sent in one direction	Devices that are connected via Duplex are able to send data in both directions simultaneously.
Examples	A signal is transmitted via a Simplex Fiber Optic Cable from device A to device B, the signal cannot return from device B via the same cable.	A good example of a duplex connection is your everyday telephone line, which allows for communications from both parties at the same time.



# FIBER OPTIC CONNECTORS TYPES

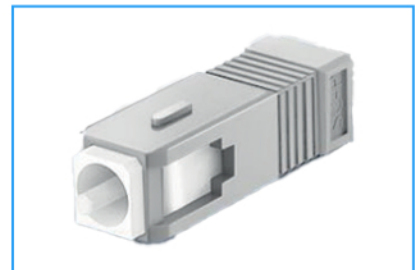
## LC CONNECTORS

LC connectors are licensed by Lucent Technologies, now known as Alcatel-Lucent. These connectors are ideal for use in high-density applications due to their small size and feature a pull-proof design. They are available in both simplex and duplex versions with a 1.25mm zirconia ferrule. Additionally LC connectors also make use of a specialized latch mechanism in order to provide stability within rack mounts.



## SC CONNECTORS

SC connectors, also known as Subscriber Connectors, Square Connectors or Standard Connectors are non-optical disconnect connectors with a 2.5mm pre-radius-ed zirconia ferrule. They are ideal for quick patching of cables into rack or wall mounts due to their push-pull design. Available in simplex and duplex with a reusable duplex holding clip to allow for duplex connections.



## FC CONNECTORS

FC connectors are known as both Ferrule Connectors and Fiber Channel Connectors. They feature a durable threaded coupling and are best suited for use within telecoms applications and make use of non-optical disconnect.



## ST CONNECTORS

ST connectors or Straight Tip connectors make use of a semi-unique bayonet connection with a 2.5mm ferrule. ST's are great fiber optic connectors for field installation due to their reliability and durability. They are available in both simplex and duplex

