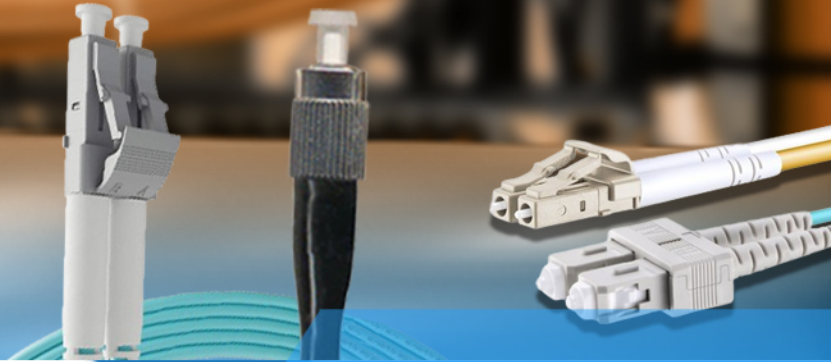
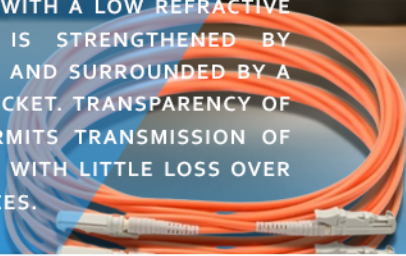


## FIBER OPTIC

# 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 SC-SC MULTI MODE OM2 DX 25M

NS-SCUPC-SCUPC-DX-OM2-25M

### 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.

- 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.

### FEATURES

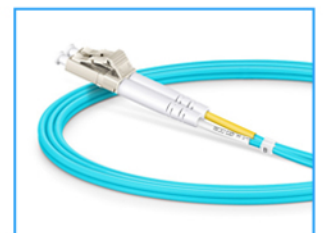
- Duplex and simplex versions.
- Uniform and hybrid cord versions.
- 100% factory transmission tested per ANSI/TIA-568-C.3.
- Cordage color coding per ANSI/TIA-598-C.

### 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

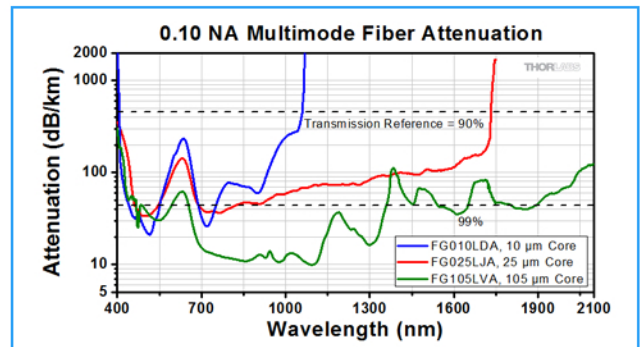
- Operation temperature: -20 °C to +70 °C (-4 °F to +158 °F).
- Storage temperature: -40 °C to +80 °C (-40 °F to +176 °F)
- Humidity: 95 % RH (non-condensing).

## 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

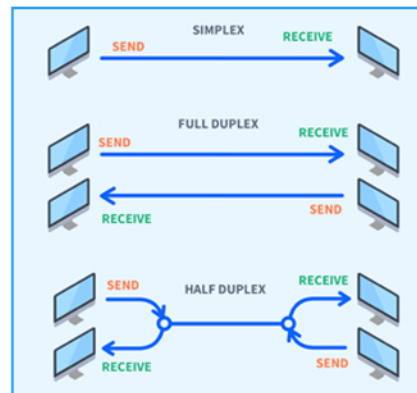


## CONSTRUCTION

- 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

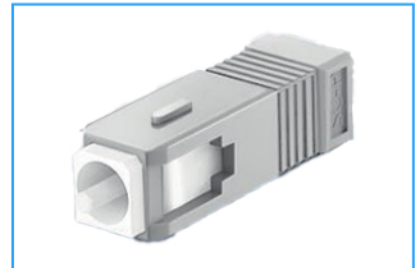
## LC CONNECTORS

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

