

FIBER OPTIC

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PATCH CORD

Product Web Page



## NS-SCUPC-LCUPC-DX-SM-5M

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-LC SINGLE MODE DX 5M

## DESCRIPTION

**Singlemode 9/125- $\mu$ m (051) Optical Fiber Patch Cords:**

Singlemode optical fiber patch cords can be used as cross-connect jumpers, equipment and work area cords. All Netsys optical fiber patch cords are 100% factory tested for insertion and return loss to ensure transmission performance per ANSI/TIA-568-C.3 standard specifications.

Cordage used in singlemode fiber cords is color-coded per ANSI/TIA-598-C - 9/125- $\mu$ m 10G singlemode cables are yellow in color.

## FEATURES

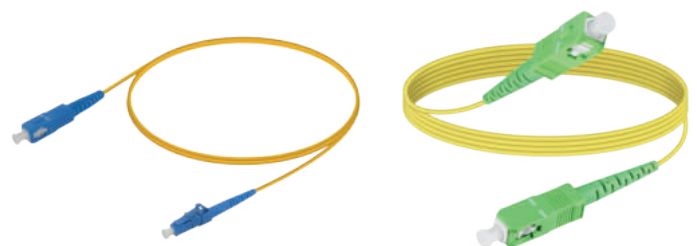
- Duplex and simplex versions.
- Uniform and hybrid cord versions.
- 100% factory transmission tested per ANSI/TIA-568-C.3.
- Cordage color coding per ANSI/TIA-598-C.
- Plastic body color coding per ANSI/TIA-598-C.3
- Position A/Position B markings.
- Slim-profile boots with durable flexible cable strain 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

9/125- $\mu$ m singlemode optical fiber.



# TECHNICAL SPECIFICATION

## CONNECTOR TYPES

Connector type: ST/SC/LC/FC/MT-RJ UPC singlemode  
ST/SC/LC/FC APC singlemode FOCIS (ANSI/TIA/EIA-604)  
compliant.

## CONSTRUCTION

simplex or duplex fiber cordage.  
thermoplastic outer jacket (OFNR-rated)  
Or Plenum (OFNP-rated).  
thermoplastic strain relief

## MECHANICAL

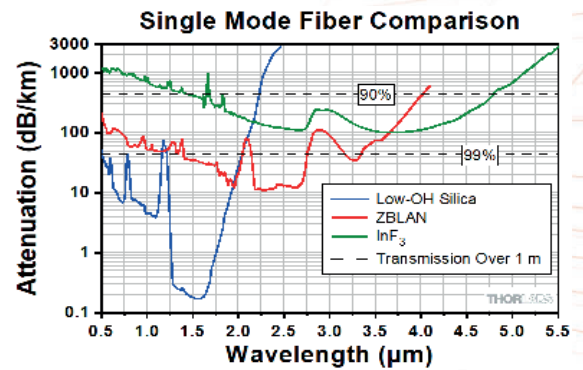
Connector ferrule: ceramic.  
End-face radius of curvature: 10 mm (0.39 in)  
<math>R < 30\text{ mm}</math> (1.18 in).  
Apex offset: <math>< 50\text{ }\mu\text{m}</math>.  
Cable material: PVC OFNR.  
Cable jacket color: yellow.

## ENVIRONMENTAL

Operation temperature: Riser;  
<math>-20\text{ }^{\circ}\text{C}</math> to <math>+70\text{ }^{\circ}\text{C}</math> (<math>-4\text{ }^{\circ}\text{F}</math> to <math>+158\text{ }^{\circ}\text{F}</math>).  
Plenum; <math>0\text{ }^{\circ}\text{C}</math> to <math>+60\text{ }^{\circ}\text{C}</math> (<math>32\text{ }^{\circ}\text{F}</math> to <math>+140\text{ }^{\circ}\text{F}</math>).  
Storage temperature: <math>-40\text{ }^{\circ}\text{C}</math> to <math>+80\text{ }^{\circ}\text{C}</math> (<math>-40\text{ }^{\circ}\text{F}</math> to <math>+176\text{ }^{\circ}\text{F}</math>).  
Humidity: 95%RH (non-condensing).  
Cable jacket color: yellow.

## COMPLIANCE

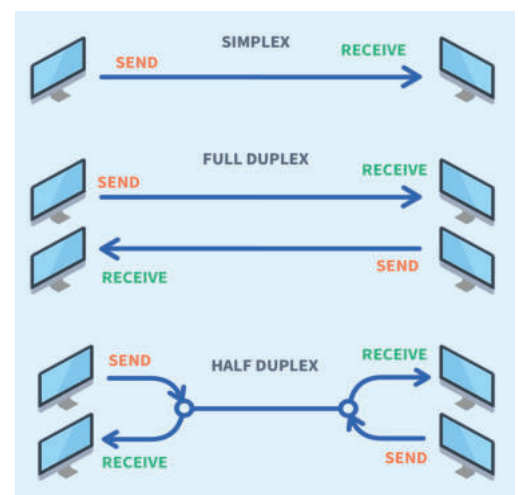
ANSI/TIA-568-C.3, ISO/IEC 11801 2nd Ed. CENELEC EN  
50173, UL94V-0, TIA-604-3 (FOCIS-3).



## TRANSMISSION PERFORMANCE

Return loss: UPC:  $\leq -50\text{ dB}$   
APC:  $\leq -60\text{ dB}$   
Insertion loss: ST, SC, LC, FC: typical  $-0.2\text{ dB}$ ,  
max  $-0.3\text{ dB}$ .  
MT-RJ: typical  $-0.3\text{ dB}$ , max  $-0.5\text{ dB}$ .

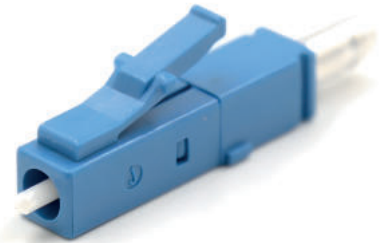
	Simplex	Duplex
Direction of communication	Simplex communications are sent in one direction	Devices that are connected via Duplex are able to send data in both directions simultaneously.
Examples	A signal is transmitted via a Simplex Fiber Optic Cable from device A to device B, the signal cannot return 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 an 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 connectos 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 and duplex

