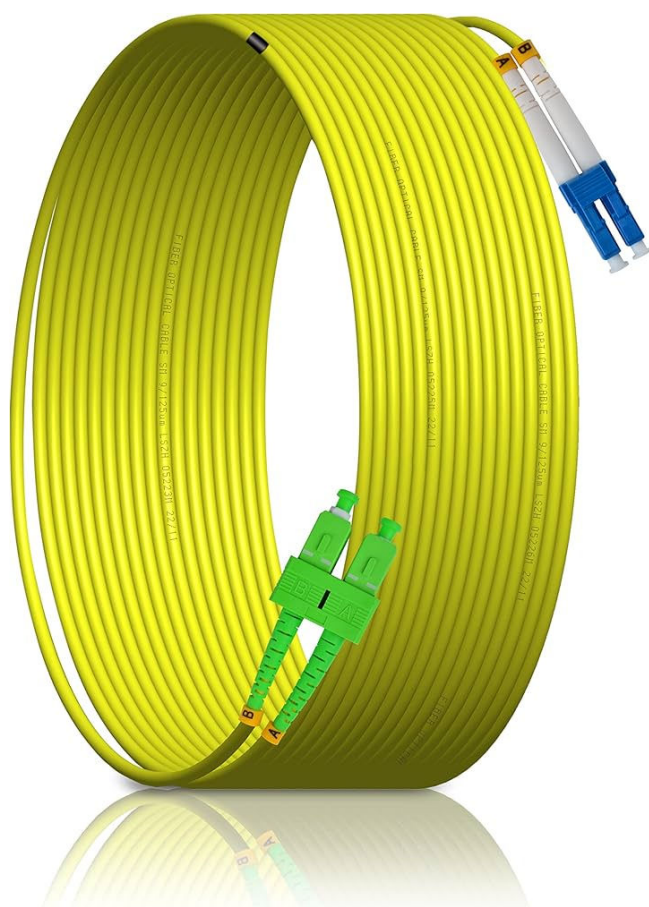


Optical Fiber Patch Cord

TECHNICAL DATA SHEET

LSZH Fiber Optic Patch Cord SM (G.657A1) 9/125 (SC-APC/LC-UPC) Duplex 3.0 mm



LSZH Fiber Optic Patch Cord SM (G.657A1) 9/125 (SC-APC /LC-UPC) Duplex (3.0 mm)

Product Description:

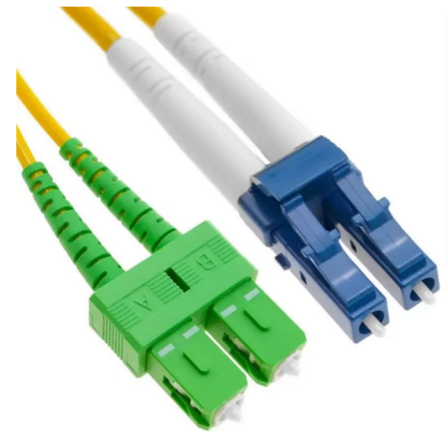
The LSZH Fiber Optic Patch Cord Single Mode G.657.A1 (9/125 μm) SC-APC to LC-UPC Duplex 3.0 mm is a high-performance hybrid optical cable designed for reliable, low-loss transmission in modern fiber optic networks.

It combines an SC/APC connector (angled polish for ultra-low reflection) with an LC/UPC connector (compact, high-density interface), enabling seamless connectivity between different optical devices. The duplex configuration supports simultaneous transmit and receive (Tx/Rx), making it ideal for high-speed communication systems.

The G.657.A1 bend-insensitive fiber ensures stable performance in tight routing conditions, while the LSZH jacket provides enhanced safety for indoor installations.

Features:

- Hybrid SC/APC to LC/UPC connectivity
- Duplex design for simultaneous Tx/Rx communication
- APC polish minimizes back reflection
- Compact LC connector for high-density installations
- G.657.A1 bend-insensitive fiber for tight routing
- LSZH jacket for enhanced fire safety
- Durable 3.0 mm cable construction
- High compatibility with standard SM fiber networks
- Reliable long-term optical performance

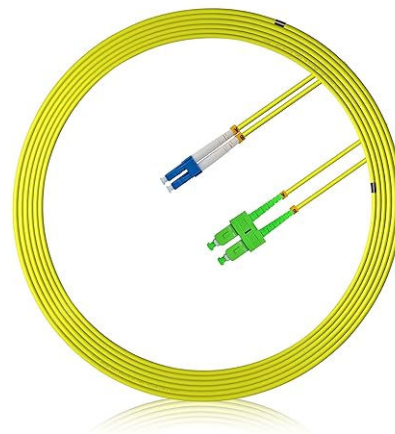


Fiber Specifications:

Parameter	Value
Fiber Type	Single Mode
Standard	ITU-T G.657.A1
Core Diameter	9 μm
Cladding Diameter	125 μm
Operating Wavelength	1310 nm / 1550 nm
Attenuation @1310 nm	≤ 0.35 dB/km
Attenuation @1550 nm	≤ 0.22 dB/km
Mode Field Diameter	$\sim 8.6\text{--}9.2$ μm
Numerical Aperture	~ 0.13
Bend Performance	Bend-insensitive
Compatibility	G.652.D compatible

Applications:

- FTTH (Fiber to the Home) networks
- GPON / EPON passive optical networks
- Telecom infrastructure and backbone systems
- Data centers and high-density environments
- Optical Distribution Frames (ODF)
- Patch panels and fiber cabinets



Optical Performance:

Parameter	Value
Insertion Loss	≤ 0.3 dB
Return Loss	≥ 60 dB (APC) / ≥ 50 dB (UPC)
Repeatability	≤ 0.1 dB
Durability	≥ 1000 mating cycles
Signal Stability	High

Environmental Conditions

- Operating Temperature: -40°C to $+85^{\circ}\text{C}$
- Storage Temperature: -45°C to $+85^{\circ}\text{C}$
- Suitable for indoor telecom and data center environments