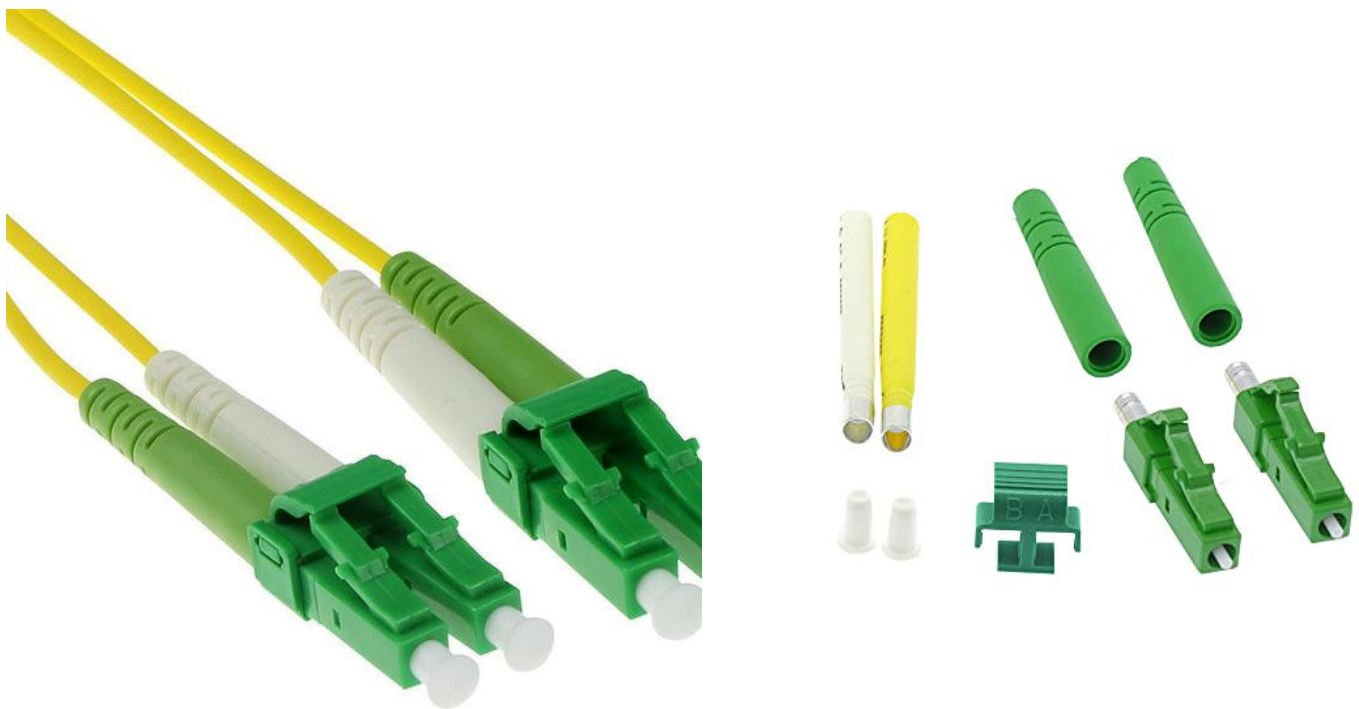


Optical Fiber

TECHNICAL DATA SHEET

Fiber Optic LC/APC DX Connector green



Fiber Optic LC/APC DX Connector green

Product Description:

An LC APC connector is a type of fiber optic connector used to join optical fibers accurately and with minimal signal loss, especially in single-mode fiber networks. It's based on the LC (Lucent Connector) small-form-factor design with an APC (Angled Physical Contact) polish on the ferrule end-face, which dramatically reduces back-reflection and enhances signal quality compared to flat or UPC types.



Applications:

- FTTH (Fiber to the Home) networks
- GPON / EPON passive optical networks
- Telecommunications backbone infrastructure
- Long-haul single-mode fiber links
- Data centers & high-density patch panels
- Optical Distribution Frames (ODF)

Technical Specifications:

Parameter	Standard Value
Insertion Loss (Typical)	$\leq 0.2 - 0.3$ dB
Insertion Loss (Maximum)	≤ 0.34 dB
Return Loss (Minimum)	$\geq 60 - 65$ dB
Fiber Mode	Single-mode (9/125 μm)
Wavelengths Supported	1310 nm, 1550 nm

Mechanical Characteristics:

Mechanical Parameter	Specification
Connector Type	LC APC
Ferrule Material	Zirconia ceramic
Ferrule Diameter	1.25 mm
Cable Diameter Compatibility	~0.9 – 3.0 mm
Connector Housing Color	Green
Mating Durability	≥ 500–1000 cycles

Environmental Specifications:

Parameter	Operating Range
Operating Temperature	–40 °C to +75 / +85 °C
Storage Temperature	Similar to operating
Temperature Effect on Insertion Loss	~±0.2 – 0.3 dB
Environmental Sealing	Depends on product spec

Benefits:

- High return loss (≥ 60 dB) reduces back reflection and improves signal stability.
- Low insertion loss (≤ 0.3 dB typical) ensures minimal signal attenuation.
- 8° angled polish minimizes optical back reflection (APC design principle).
- Compact small-form-factor (1.25 mm ferrule) supports high-density patch panels.
- Ideal for single-mode (9/125 μm) long-distance transmission.



Raw Materials Detailed List:

Item	Part	Material	RoHS Compliance
1	Anti-dust Cap	LDPE (Low-Density Polyethylene)	Yes
2	Housing	PBT (Polybutylene Terephthalate)	Yes
3	Inner Core	PBT (Polybutylene Terephthalate)	Yes
4	Spring	SUS304 Stainless Steel	Yes
5	Ferrule	Zirconia Ceramic	Yes
6	Body	Copper Alloy	Yes
7	Boot	TPV (Thermoplastic Vulcanizate)	Yes

Note:

The connector boot is available in Blue and White colors.