
CX-OPT-SCAPC-PC

Pre-Connectorized Drop Cable

Speed, precision, and lasting performance in modern fiber access networks

Introduction

The ComponexX CX-OPT-SC/APC-PC is a rugged, pre-connectorized fiber patch cord engineered for dependable optical performance in both outdoor and indoor network environments. Built around a 5.0 mm low-smoke, zero-halogen (LSZH) round jacket, it combines mechanical durability with optical precision for long-term stability and reduced installation time.



Each cable is factory-terminated with high-precision SC/APC connectors, minimizing insertion loss while ensuring stable return loss performance even under variable environmental conditions. With robust tensile, crush resistance, and full dielectric construction, the CX-OPT-SC/APC provides a reliable, plug-and-play solution for FTTH, access, and enterprise applications.

Applications

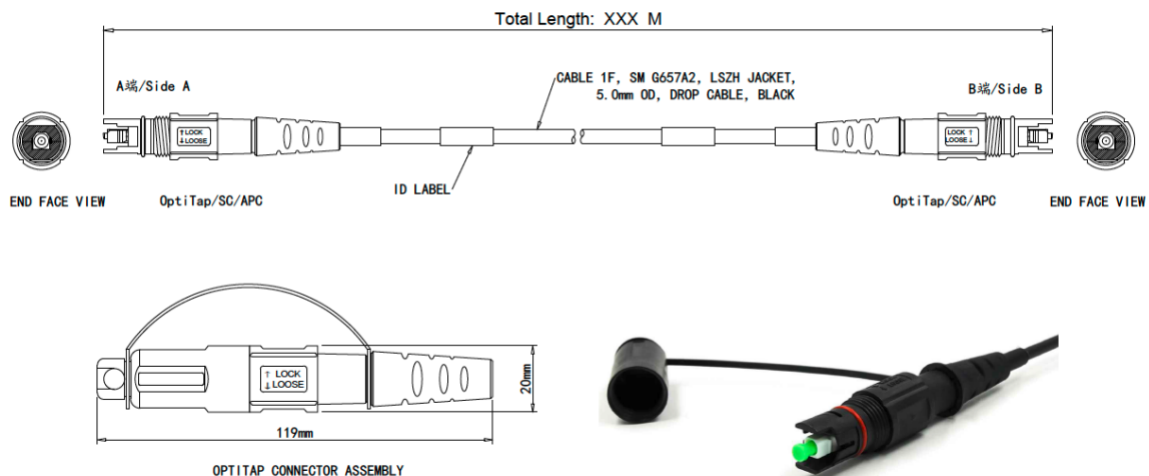
- FTTH / FTTx access and drop connections
- Outdoor and indoor patching in distribution cabinets or wall boxes
- Telecom and broadband network interconnections
- Aerial, conduit, or riser installations requiring rugged, flexible performance

Key Advantages

- **Rugged LSZH Construction:** 5.0 mm round LSZH jacket provides excellent flexibility and flame resistance for demanding installations.
- **High-Precision SC/APC Connectors:** Factory-polished connectors ensure low insertion loss (≤ 0.3 dB) and high return loss (≥ 60 dB).
- **Strength Member:** Kevlar yarns with stainless steel mesh to support higher tensile and good span 100-200meter and improve tensile and crush resistance.
- **Plug-and-Play Efficiency:** Pre-terminated design eliminates field polishing and splicing, saving labor and setup time.
- **Stable Optical Performance:** G.657A2 fiber maintains consistent attenuation under bend and temperature variation.
- **Wide Operating Range:** Performs reliably across -40°C to $+75^{\circ}\text{C}$ for indoor or outdoor environments.

Technical Specifications

Cable Parameter		
Item	Description	Parameter
Fiber Type	—	SM-G657A2
Fiber Count	—	1
Tight Buffer	Color	Blue
	OD	0.9MM
	Material	PVC
Strength Member	1	Kevlar
	2	Stainless Steel Mesh
Outer Jacket	Material	LSZH
	Color	Black
	OD	5.0 ± 0.2 mm
Span	Meters	100-200
Minimum Bending Radius	Long Term	10 D
Minimum Bending Radius	Short Term	20 D
Tensile Strength	Long Term	450 N
Tensile Strength	Short Term	2000 N
Crush Resistance (N/100mm)	Long Term	2000 N
Crush Resistance (N/100mm)	Short Term	1000 N
Working Temperature	—	-20 ~ 70 °C



Connector Parameters		
Item	Condition / Wavelength	Parameter
Fiber Type	—	SM-G657A2
Attenuation	1310 nm	≤ 0.35 dB/km
	1550 nm	≤ 0.35 dB/km
Mode Field Diameter (MFD)	1310 nm	8.4 – 9.2 μm
	1550 nm	9.3 – 10.3 μm
Cladding Diameter	—	125 ± 0.7 μm
Coating Diameter	—	245 ± 5 μm
Core-Cladding Concentricity Error	—	≤ 0.5 μm
Cable Cutoff Wavelength (λ _{cc})	—	≤ 1260 nm
Micro-bend induced attenuation	10 turns, r=15 mm, 1550 nm	≤0.03 dB
	10 turns, r=15 mm, 1625 nm	≤0.1 dB
	1 turn, r=10 mm, 1550 nm	≤0.1 dB
	1 turn, r=10 mm, 1625 nm	≤0.2 dB

Connector Parameters		
Item	Condition / Test	Parameter
Connector Type	—	OPT/SC/APC
Insertion Loss	@1310 / 1550 nm	≤ 0.3 dB
Return Loss	@1310 / 1550 nm	≥ 60 dB
Interchangeability	@1310 / 1550 nm	≤ 0.2 dB
Repeatability	@1310 / 1550 nm	≤ 0.2 dB
Durability (Mating Cycles)	—	800 – 1000
Operating Temperature	—	–40 ~ 75 °C
Test Wavelength	—	1310 nm / 1550 nm