

Mini Module PLC Splitter SC APC

FTTH Computing Infrastructure Solutions



Overview

Planar lightwave circuit (PLC) splitter is a type of optical power management device that is fabricated using silica optical waveguide technology to distribute optical signals from Central Office (CO) to multiple premise locations. It features small size, high reliability, wide operating wavelength range and good channel-to-channel uniformity. These are widely used in PON networks to realize optical signal power splitting as a low-cost solution.

They are fully passive and suitable for bidirectional PON/GPON, supplied in modular configuration with SC/APC pigtailed on input and output ports. Pigtailed are G.657.B3 fiber, length 1 meter, flame-retardant/low-smoke. SC/APC connectors are epoxy type, zirconia ferrule, dust cap and IEC 61753 Grade B/1 compliant.

Key Features

- Low Insertion Loss, Low PDL(Polarization Dependent Loss)
- Compact Design
- Exceptional Reliability and Stability
- Wide Operating Wavelength: From 1260nm to 1650nm
- Wide Operating Temperature: From 0°C to 65°C
- Labeling and labels can be customized as per request

Application

- FTTX Systems
- LAN, WAN and Metro Networks
- Analog/Digital Passive Optical Networks
- CATV Networks
- Other applications in fiber optic systems

Optical Specifications

Port Configuration	1x4	1x8	1x16
Insertion Loss (dB)	7.5	10.8	13.8
Loss Uniformity (dB)	0.6	0.8	0.8
Polarization Dependent Loss(dB)	0.2	0.4	0.4
Wavelength Dependent Loss(dB)	0.3	0.3	0.5
Temperature Dependent Loss (dB)	0.4	0.4	0.5
Return Loss (dB)	SC APC $\geq$ 55		
Directivity (dB)	$\geq$ 55		
Operating Wavelength (nm)	1260~1650		
Fiber Type	SM G657B3		
Length	1 meter		
Operating Temperature	0~+65°C		
Storage Temperature	0~+65°C		
Relative humidity	5%-95%		

Connector Specification IEC 61753 Grade B/1 compliant

Insertion Loss	$\leq$ 0.12 dB average, $\leq$ 0.25 dB max for >97% of samples
Return Loss	$\geq$ 60 dB (in pairs)
Connector durability	>1000 mating cycles
Working temperature	-40 °C to +85 °C

Stainless Steel 304 Tube Characteristics

Operating altitude	Up to 3,820 m
Ingress protection	prevent the intrusion of solids, liquids, dust, or other substances
Corrosion resistance	Yes, SS 304 material

Profile Size

1x2;1x3;1x4;1x6;1x8	7x4x50mm or 7x4x60mm
1x12;1x16	12x4x60mm
1X32	20x6x80mm
1X64	40x6x100mm

