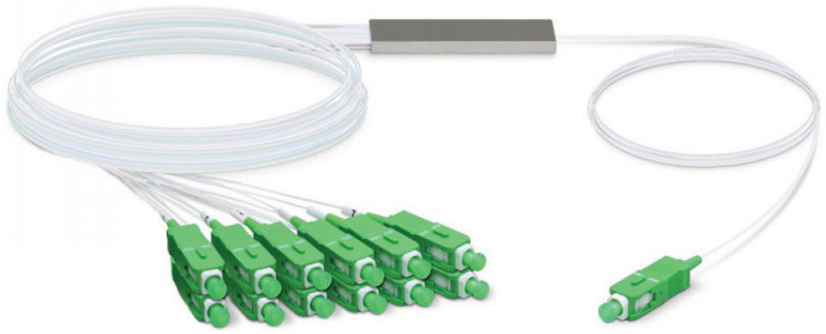
FiberLight

PN: FLPLC1012SCAPC009

Optical Fiber Splitter

TECHNICAL DATA SHEET

1 x 12 PLC Fiber Splitter, Mini Module, 900μm, SC/APC, Single mode



1 x 12 PLC Fiber Splitter, Mini Module, 900µm, SC/APC, Single mode

Product Description

The 1 × 12 PLC Fiber Splitter (Mini Module) is a passive optical component based on Planar Lightwave Circuit (PLC) technology, designed to evenly split one optical input signal into twelve output ports with stable and uniform optical performance.

It is housed in a compact mini module enclosure with 900µm tight-buffered fiber and terminated with SC/APC connectors, making it suitable for FTTH access networks, optical distribution frames (ODF), and fiber distribution boxes (FDB). It provides low insertion loss, excellent uniformity, and long-term environmental stability.

Features:

- 1 × 12 optical splitting ratio
- PLC (Planar Lightwave Circuit) technology
- Mini module compact design
- 900µm tight-buffered fiber construction
- SC/APC connectorized ends
- Low insertion loss and high reliability
- Excellent channel uniformity
- Wide operating wavelength range (1260–1650 nm)
- Plug-and-play installation
- RoHS compliant
- Telcordia GR-1209 / GR-1221 qualified

Application:

- FTTH (Fiber to the Home) networks
- Passive Optical Networks (GPON / EPON)
- Optical Distribution Frames (ODF)
- Fiber Distribution Boxes (FDB)
- CATV distribution systems
- Telecom access networks

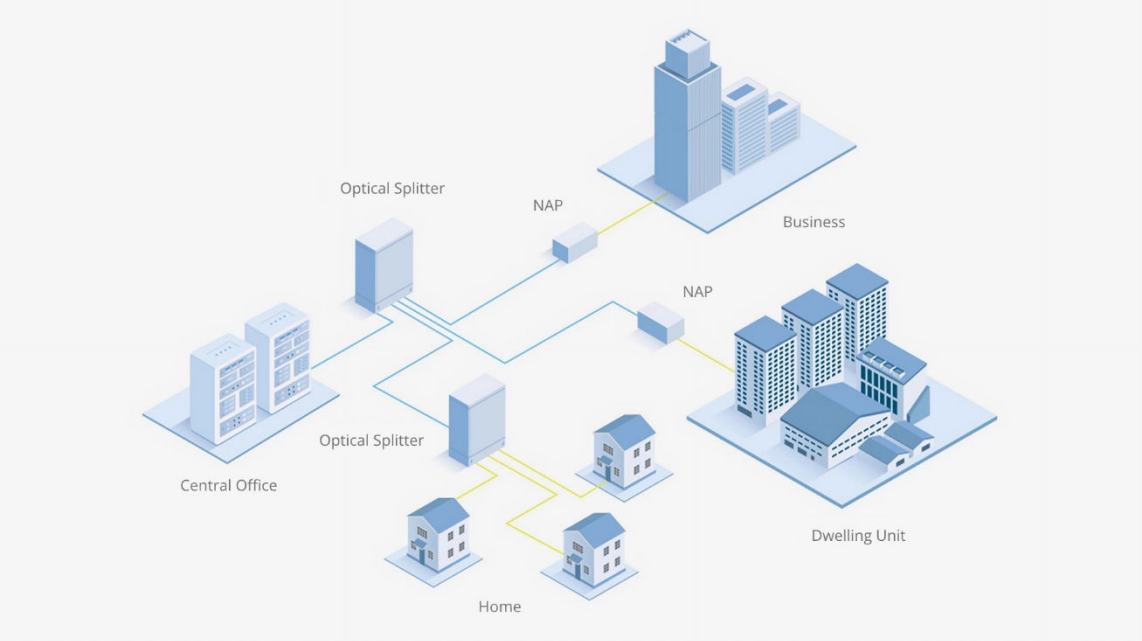
Optical Specifications

Parameter	Value
Configuration	1 × 12
Operating Wavelength	1260 ~ 1650 nm
Insertion Loss (Max)	≤ 12.0 dB
Uniformity	≤ 1.2 dB
Return Loss	≥ 60 dB (APC)
Polarization Dependent Loss (PDL)	≤ 0.3 dB
Directivity	≥ 55 dB
Wavelength Dependent Loss (WDL)	≤ 0.6 dB
Repeatability	≤ 0.1 dB
Stability	≤ 0.2 dB

Mechanical Specifications

Item	Specification
Package Type	Mini Module
Fiber Type	Single Mode OS2
Fiber Diameter	900μm Tight Buffer
Connector Type	SC/APC
Housing Material	ABS / Metal Mini Module
Input/Output Length	0.5 m – 1.5 m (Customizable)
Operating Temperature	-40°C ~ +85°C

Widely used in FTTX projects and data communication centers



The high-quality fiber optic splitter ensures stable transmission