



DATASHEET

PLC Fiber Splitter, 1U Rack Mount Type, Singlemode

Data Center & Cloud 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.

FS.COM provides whole series of 1xN and 2xN splitter products that are tailored for specific applications.

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 -40° C to 85° C
- Conformed to Telcordia GR-1221, GR-1209 standard and RoHS

Application

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

Technical Specification

Parameters	1×2	1×4	1×8	1×16	1×32	1×64
Operating Wavelength (nm)	1260~1650					
Fiber Type	G657A1 or customer specified					
Insertion Loss (dB) (P/S Grade)	≤4.0	≤7.3	≤10.6	≤13.8	≤17.0	≤20.8
Loss Uniformity (dB)	0.4	0.6	0.8	1.2	1.5	2
Polarization Dependent Loss (dB)	0.2	0.2	0.2	0.25	0.3	0.35
Return Loss (dB) (P/S Grade)	55/50	55/50	55/50	55/50	55/50	55/50
Directivity (dB)	55	55	55	55	55	55
Wavelength Dependent Loss (dB)	0.3	0.3	0.3	0.5	0.5	0.5
Operating Temperature (°C)	-40~85					
Storage Temperature (°C)	-40~85					

Note:

- 1. Specified without connectors.
- 2. Add an additional 0.2dB loss per connector.

Technical Specification

Parameters	2×2	2×4	2×8	2×16	2×32	2×64
Operating Wavelength (nm)	1260~1650					
Fiber Type	G657A1 or customer specified					
Insertion Loss (dB) (P/S Grade)	≤4.2	≤7.5	≤11.0	≤14.5	≤17.5	≤21.0
Loss Uniformity (dB)	0.8	1	1.2	1.5	1.8	2
Polarization Dependent Loss (dB)	0.2	0.3	0.3	0.3	0.3	0.5
Return Loss (dB) (P/S Grade)	55/50	55/50	55/50	55/50	55/50	55/50
Directivity (dB)	55	55	55	55	55	55
Operating Temperature (°C)	-40~85					
Storage Temperature (°C)	-40~85					

Note:

- 1. Specified without connectors.
- 2. Add an additional 0.2dB loss per connector.

Applications Configuration Diagram

