

Fiber Optic Splitter Technical Specifications



Article Overview

Fiber optic splitters are passive devices that divide or combine optical signals, with key specifications including split ratio, insertion loss, polarization dependent loss, wavelength range, and operating temperature.

Overview

A fiber optic splitter is a passive optical component that splits a single incoming optical signal into multiple outputs or combines multiple inputs into one, without requiring electrical power, making it highly reliable and cost-effective for FTTH, PON, and LAN/WAN networks . Splitters are available in two main technologies:

- Planar Lightwave Circuit (PLC): Uses silica waveguides for precise, high-density splitting, suitable for high split ratios (1:16, 1:32, 1:64, 1:128) and long-distance networks .
- Fused Biconical Taper (FBT): Uses fused fibers for low-cost, short-distance applications with low split ratios (1:2 to 1:8), .

Key Technical Specifications

- Split Ratios: Common ratios include 1:2, 1:4, 1:8, 1:16, 1:32, 1:64, and 1:128, depending on network size and application .
- Insertion Loss (IL): Typically ≤ 3.8 dB for PLC splitters, representing the optical power loss from input to output

Article Content

OPTICO1x128 PLC Splitter Datasheet

Planar lightwave circuit (PLC) splitter is a type of optical power management device that is fabricated using silica optical waveguide

Technical parameters of optical passive splitter | Yingda

Optical passive splitter main technical parameters include split ratio, insertion loss, return loss, PDL, directivity, loss

Understanding Fiber Optic Splitters: Principles, Parameters, Types ...

In conclusion, fiber optic splitters play a crucial role in optical networks. They operate based on the 1:N splitting principle and are

Fiber Optic Splitters | PLC & FBT Optical Splitters

Explore our comprehensive selection of high-performance fiber optic splitters. We offer a variety of PLC

Bare Splitters (250 μm) | Corning

All bare splitters are delivered with Corning's low bend loss LBL® optical fiber (compliant with ITU G.657.A2 standard) with a

Bare PLC Fiber Splitter Datasheet | FS

Overview Planar lightwave circuit (PLC) splitter is a type of optical power management device that is fabricated using silica optical

PASSIVE OPTICAL SPLITTER

A Passive Optical Network (PON) is a fiber optic technology utilizing point-to-multipoint topology and optical splitters to deliver data

Fiber Optic PLC splitters

Optical splitters are used for connecting or splitting an optical signal into 2-128 signals usually from one source. They come in two

Introduction to Passive Optical Network Splitter Architectures

Fiber Broadband Association Technology Committee February 2025 The choice of splitter architecture for a passive optical network

1x8 Fiber Optic PLC Splitter: Specs, Price & Power Budget Guide ...

What this guide is: A technical buying guide written by optical engineers who have specified splitters for FTTH

How Does a Fiber Optic Splitter Work

This post provides a introduction to how does a fiber optic splitter work, and optical fiber splitter application in FTTH.

Fiber Optic Splitter: How It Works & Types Guide

This guide demystifies fiber optic splitters, explaining their design, operating principles, types, key specifications, and

Splitters

Explore splitter fiber assemblies for precise 1:2 light routing in spectroscopic setups. Compatibility with UV-VIS and VIS-NIR

Fiber Splitters The Role And Application Guide

The working principle of fiber splitters is relatively simple, and the signal distribution is achieved through the principle

What Is an Optical Splitter?

What's an optical splitter? How does the fiber optic splitter work? How many fiber splitter types? How to choose the

Everything You Need to Know About Fiber Optic Splitter: A Detailed ...

Master fiber optic splitter specifications like insertion loss and uniformity. From bare fiber to rack-mount modules,

FIBERONE: Fiber Optic Splitter Overview | 2026

How does a fiber optic splitter work? Fiber optic splitters are passive devices. This means that they don't generate power or require

Bare Fiber PLC Fiber Splitter Data Sheet | FS

FS Bare Fiber Splitters are engineered for high-density networks, offering exceptional scalability and reliability. FS PLC splitters

ABS Module PLC Fiber Splitter Data Sheet | FS

With its compact structure, stable optical characteristics, robust performance and reliable certification, FS PLC splitter solutions

4 Important Technical Indicators of Fiber Optic Splitters

To select best fiber optic splitter, Let's delve into four critical indicators: insertion loss, splitting ratio, isolation and

Optical Splitters for Central Office/Headend

Passive optical devices, singlemode PLC and FBT devices bare splitters and couplers specification and

FHD® Cassette PLC Fiber Splitter Data Sheet | FS

Overview Planar lightwave circuit (PLC) splitter is a type of optical power management device that is fabricated using

Spec Sheet

It is available in various port configurations ranging from 1 or 2 inputs and 8 to 32 output ports. The Fiber Splitter Panel is ideal for

What is Fiber Optic Splitter and Types

This post provides a introduction to fiber optic splitters, their types, functions, and several popular Gcabling optical

Optical Splitters Demystified: The Silent Heroes Powering Your FTTH ...

In the world of fiber optic communications, where high-speed data zips across continents in the blink of an eye, there

Optical-PLC-Splitter-Specification

1.1 General This specification covers the standards and requirements for the construction, properties, testing and packing of the

Contact Us

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