

# PLC splitter with fiber optic splitter



## Article Overview

A PLC (Planar Lightwave Circuit) fiber optic splitter is a passive device that divides a single optical signal into multiple outputs with uniform power, ideal for PON and FTTH networks.

What is a PLC Splitter?

A PLC splitter is a passive optical device that takes one input optical signal and splits it into multiple output signals without requiring electrical power, making it highly reliable and cost-effective. It uses a planar waveguide circuit etched on a silica glass substrate to guide light and evenly distribute it across the output channels. This technology ensures consistent signal uniformity, low insertion loss, and stable performance across standard wavelengths like 1310nm, 1490nm, and 1550nm.

How It Works

The input light enters the splitter and travels through etched optical waveguides. The circuit is designed to divide the light either equally or according to a specific split ratio. For example, a 1x8 PLC splitter splits one input into eight outputs, each carrying 1/8th of the original signal power. Unlike FBT (Fused Biconical Taper) splitters, PLC splitters perform better at high split ratios (1x16, 1x32, 1x64) and maintain uniformity across a wide wavelength range.

Types and Form Factors

PLC splitters come in various form factors to suit different deployment environments...

## Article Content

May 07, 2026

Fiber Optic Splitter Manufacturer | PLC & FBT Splitters

Fiber Optic Splitter Manufacturer for FTTH & PON Networks A fiber optic splitter is a passive optical device used to divide optical

May 21, 2026

1x32 PLC Fiber Optic Splitter

The PLC splitter takes minimal distortion during usage due to its small form and bending insensitive cables, ensuring stable optical

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Fiber Optic Splitter 1x4

Fiber Optic Splitter 1x4 PLC (Planar Lightwave Circuit) Splitters are designed for single-mode applications and offer an even split

Oct 13, 2025

WDM Fiber, Wavelength Division Multiplexing

Splitter & WDM T& S PLC optical splitters deliver low insertion loss and stable performance, making them ideal for FTTX signal

Jan 25, 2026

PLC Splitters | High-Performance Optical Solutions | FiberMania

To meet diverse project needs, FiberMania offers PLC splitters in a variety of configurations, including ABS modules, bare fiber

Nov 16, 2025

PLC Splitters | OEM Optical Communication Solutions | Corning

Corning's QuickPath™ PLC optical splitters reduce insertion loss and deliver high performance. These devices enable more effective

Apr 08, 2026

PLC Fiber Splitter: A Critical Component in Fiber Optic Networks

In conclusion, the PLC Fiber Splitter is a critical component in modern fiber optic infrastructure. Its ability to efficiently

Aug 10, 2025

Amazon : PLC Splitter,1x8 SC/APC Cassette

About this item 1x8 insert type PLC Splitter.The interface type is SC/APC, fast and practical. Applicable to

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What is a PLC Splitter? Function & Fiber Use Cases

A PLC splitter does something similar—but with laser light signals inside a fiber optic network. Inside every PLC splitter

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Fiber Optic Cable Splitters | PLC, LGX & More | Multilink

Get Fiber Optic Splitters From Multilink With more than 35 years of experience, Multilink can provide high-quality fiber optic splitters

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How Does a Fiber Optic Splitter Work

PLC splitter is a fiber splitter manufactured based on planar lightwave circuit technology, which can achieve even

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Multimode Fiber Optic PLC Splitter, 50/125 62.5/125 Multi-mode ...

Lfiber's symmetric multimode fiber optic PLC splitter is a passive optical device used to split incoming signals into two or more output

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What is a PLC Splitter and Why is it Essential for Your Fiber Network?

Are you building or upgrading a fiber optic network? You have to know about a small but vital component: the PLC

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Understanding PLC Splitters: Essential Components of Modern Fiber-Optic ...

Understanding PLC Splitters: Essential Components of Modern Fiber-Optic Networks  
As fiber-optic technology continues to advance

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Fiber Optical PLC Splitters

PLC Splitters are fabricated in a semiconductor process and can integrate different functional optical components onto a single chip.

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### 1x32 PLC Fiber Optic Splitter

PLC Splitters have an even split ratio from one input fiber to multiple output fibers. They come in various

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### Buy fiber optic splitters online | ShopFiber24

Learn everything about PLC & fiber optic splitters – technology, selection, areas of application. Discover high-quality fiber optic

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### What is PLC splitter□A Simple Guide to PLC Fiber Splitters

The PLC splitter is one compact yet effective tool that improves the performance of these networks. Imagine a single

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### Fiber-optic splitter

A fiber-optic splitter, also known as a beam splitter, is based on a quartz substrate of an integrated waveguide optical power

Aug 15, 2025

### Fiber Splitter (Fiber Optic Splitters) | PLC & FBT

Fiber splitter solutions from Maxcom featuring PLC technology, low insertion loss, and high reliability. Ideal

## Contact Us

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