

Article Overview

A tray-type optical splitter is a planar lightwave circuit (PLC) splitter housed in a tray-like structure, designed to divide a single optical signal into multiple outputs while enabling organized installation and protection in fiber optic networks.

Overview

A tray-type optical splitter is a passive optical device that splits one input optical signal into multiple outputs using PLC technology. The tray design allows the splitter to be neatly installed in fiber distribution boxes, optical distribution frames, or splice trays, providing both physical protection and efficient cable management. This design is particularly suitable for fiber-to-the-home (FTTH) networks, optical distribution networks (ODN), and CATV networks.

Key Features

- o Compact and organized: The tray structure keeps fibers neatly arranged, reducing clutter and simplifying maintenance.
- o High reliability: PLC technology ensures low insertion loss, high return loss, and uniform signal distribution across multiple outputs.
- o Flexible installation: Can be mounted in standard fiber distribution frames, cross-connect cabinets, or optical fiber distribution boxes without strict environmental requirements.
- o Customizable: Available in 1xN or 2xN configurations, with various connector types (SC, LC, FC) and fiber types to suit network needs.

Technical Considerations

- o Wavelength range: Typically supports 1260-1650 nm, covering GPON, EPON, and XGS-PON applications.
- o Splitting uniformity: Tested at standard wavelengths (1310 nm, 1490 nm, 1550 nm) to ensure consistent signal distribution.
- o Environmental protection: The tray provides shielding against physical damage and environmental factors, enhancing durability.

Applications

Tray-type optical splitters are widely used in:

- o FTTH deployments to connect a single optical line terminal (OLT) to multiple optical network terminals (ONTs) at customer premises.

Optical splitter tray type

- o Optical distribution networks for efficient signal branching.
- o CATV and broadband networks where high-density, reliable signal splitting is required. In summary, a tray-type optical splitter combines the precision of PLC technology with a practical tray design, offering a compact, reliable, and easy-to-install solution for modern fiber optic networks .

Fiber Fusion Splice Tray Fiber optic splice trays are designed to provide a location to store and to protect the fiber cables and the

Additional trays for optical splitters, water sensors or mechanical splices are available. Especially for optical splitter Corning

SPECIFICATIONS Panduit's Passive Optical LAN Splitter Trays are rack mountable enclosures that contain optical splitters used in

1×N tray-type PLC splitter designed for fast installation inside closures, ODFs,

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

Corning splice trays use proven designs and fiber organization technology to provide optimum physical protection for fusion and

Housed in a tray-like structure, this splitter is designed for easy and organized installation within fiber optic splice trays or distribution

The LightLink Splitter Trays are a packaged system that include factory-preinstalled PLC splitters and splicing trays, and planar

A beam splitter, or beamsplitter, is an optical component used to divide incident light into two separate beams based on wavelength,

The type of splice technology used (fusion or mechanical) and whether planar light circuit (PLC) splitters are required will help

Home Product Type Tools & Accessories Fiber Tools, Consumables & Accessories Fiber Splice Trays & Cassettes

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

Optical splitter tray type

What are Beam Splitters? A beam splitter (or beamsplitter, power splitter) is an optical device which can split an incident light beam

Integrated Routing Fibre Optic Splice Tray IR Single Element SE Positive fibre management - minimum bend radius 30mm 2

This type of PLC Splitter is typically installed in the optical tray of fiber distribution boxes, fiber access terminals, and other equipment

Tray Type PLC Splitter can accommodate a variety of PLC Splitter with various types of connectors:

Web: <https://www.kremgroup.co.za>

