

28 Optical Splitter Ports



Article Overview

A single QSFP28 port can be split into four lower-speed optical channels, typically 25G each, using breakout cables or transceivers.

Overview of QSFP28 Splitter Functionality

QSFP28 (Quad Small Form-factor Pluggable 28) ports support four independent lanes, each capable of 25–28 Gbps, allowing a single 100G port to be split into four discrete 25G connections . This is commonly referred to as breakout or splitter functionality. The physical interface uses CAUI-4, which defines how the switch ASIC communicates with the module, and the module converts these electrical lanes into optical signals for CWDM4, LR4, ER4, or parallel fiber SR4/PSM4 connections .

Types of Splitter Implementations

- Breakout DACs (Direct Attach Cables): Copper cables that split a single QSFP28 port into multiple SFP28 ports for short-distance connections .
- Breakout AOCs (Active Optical Cables): Optical cables that provide longer reach while splitting a 100G port into four 25G links .
- Breakout Transceivers: QSFP28 modules that connect to MPO-12 or parallel fiber and split into four SFP28 ports via patch panels or breakout cables .

Practical Use Cases

- Data Center Flexibility: One 100G port can serve multiple 25G devices, improving port utilization without adding extra 100G ports .
- Server Connectivity: QSFP28-to-4xSFP28 splitter cables allow a single 100G switc...

Article Content

Beam Splitter Selection Guide

Optical Beamsplitter Selection Guide Overview An Optical Beamsplitter is an optic or optical device that is used to split a beam of

Optical Beamsplitter

A beamsplitter is an optical component used to split a beam of incident light into two parts in a laser or illumination system. Cube

CYP DCT-28 Optical Splitter 1x4

This CYP DCT-28 splitter will allow you to convert a single optical audio source into 4 optical audio output signals. This allows you to

Amazon : Optical Audio Splitter

Discover high-quality optical audio splitters that let you connect multiple devices. Support LPCM2.0, Dolby Digital, and DTS 5.1 for

Splitting of QSFP+ and QSFP28 ports

Most QSFP28 ports can be used with either 40G or 100G optics, DAC or AOC cables. Not all QSFP28 port can be split into channels

The Working Principle and Application Scenarios of Fiber Optic Splitters

The working principle of fiber optic splitters is based on optical coupling and splitting . When a light signal enters the

Basic Knowledge about Split Ratio and Insertion Loss of Optical Splitter

Optical splitters are vital in FTTH PON systems, distributing a single signal efficiently. Key parameters, Split Ratio and

The FOA Reference For Fiber Optics

The specifications for a splitter are loss across the device and the variability of that loss for each port. A well made splitter will have

Optical Splitters: Split Ratios, Splitting Architectures & PON Network ...

Learn about optical splitter split ratios (1:N, 2:N), centralized vs. cascaded architectures, and how to choose the right

Introduction to Passive Optical Network Splitter Architectures

The configuration below has individual splitters at a central location, but addresses that are typically not reconfigurable by jumpers,

Fiber-optic splitter

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

OZ Optics Online | Beam Splitters

This flexible design allows one to manufacture splitters with different fiber types on the input and output ports. Miniature inline

Introduction to Passive Optical Network Splitter Architectures

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

Optical Beamsplitters Explained | Cube & Polarizing Types

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

Split Ratios and Splitting Level of Optical Splitters

The centralized 1×32 splitter with distribution ports enables OTDR trace development upstream to the central office

Beam Splitters – Buyer's Guide & Supplier List | RP Photonics

This buyer's guide for beam splitters provides technical background, comparison of major types, selection criteria, and an overview of

PASSIVE OPTICAL SPLITTER

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

Amazon : Optical Splitter 2 In 1 Out: Electronics

PROZOR Digital Audio Switcher Splitter - 3 in 2 Out 3 Port Spdif Toslink Optical Switch with Remote Control, Aluminum Alloy

Basic Knowledge about Split Ratio and Insertion Loss of Optical Splitter

The splitter ratio in fiber optic networks refers to how optical power is distributed among the output ports of an optical

Amazon : Optical Output Splitter

Amazon : optical output splitter Global Recycled Standard (GRS) certified products contain recycled content that has been

Amazon .uk: Optical Splitter

Optical Cable Splitter Optical Splitter 1 In 2 Out Support to LPCM2.0, Dolby Digital, DTS 5.1 Toslink Splitters Dual Port Audio Adapter

Contact Us

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