

Check the optical splitter ports

Article Overview

Optical splitter port information can be checked by measuring insertion loss and excess loss for each output port using an optical power meter, OTDR, or specialized test equipment like CertiFiber Pro.

Understanding Splitter Port Information

Optical splitters divide a single input signal into multiple outputs, and each port has specific characteristics:

- **Insertion Loss:** The loss from the input to a specific output port, including splitting loss and connector loss.
- **Excess Loss:** The difference between the total input power and the sum of all output powers, indicating manufacturing or connector inefficiencies.
- **Split Ratio:** The designed division of optical power among output ports (e.g., 1×2, 1×32, 2×2).
- **Port Variability:** Differences in loss between individual output ports, which should be minimal for a well-manufactured splitter .

Tools and Equipment

- **Optical Power Meter and Light Source:** For measuring loss at each port.
- **CertiFiber Pro OLTS:** Provides loopback testing, automatic grading of fiber end faces, and compliance with ANSI/TIA and IEC standards .
- **OTDR (Optical Time-Domain Reflectometer):** Useful for mapping fiber routes and identifying faults, though splitter testing requires careful interpretation

Article Content

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Tech Tip Testing PON in Deep Fiber Applications

Inspect the Optical Connectors and Check the Power Levels his, such as the VIAVI OLP-87 or OLP-88 series. A PON power meter is

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Tech Tip Testing PON in Deep Fiber Applications

First, passive splitters have a high loss. For example, a 1x32 splitter can have as much as 15-17db of loss. Because of this, you'll

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How To Test Fiber Optic Splitters Or Other Passive Devices

Fiber optic couplers or splitters are available in a wide range of styles and sizes to split or combine light with minimal

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How to test fiber optic splitters or other passive devices

A Optical Splitter is different from WDM. WDM can divide the different wavelength fiber optic light into different channels. fiber optic

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Introduction to Passive Optical Network Splitter Architectures

A fiber broadband provider typically determines and overall split ratio for the network, such as 1x32 or 1x64, and uses combinations

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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

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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

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

A split ratio describes how many output ports a splitter has, and how evenly the input optical power is distributed

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Your Go-to Guide to Optical Splitter

The optical splitter is an optical power distribution device that splits one optical signal into multiple optical fiber signals

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Let's learn how to Test Optical PLC Splitters Loss in the factory

Note: 1. Excess loss is the ratio of the optical power launched at the input port of the splitter to the total optical power

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The FOA Reference For Fiber Optics

Testing Fiber Optic Couplers, Splitters Or Other Passive Devices A passive device used to split or combine

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Fiber Optic Splitter: How It Works & Types Guide

This guide demystifies fiber optic splitters, explaining their design, operating principles,

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Optical Power Splitter Calculator for PON Links

Use this optical power splitter calculator to estimate split ratio loss, branch output dBm, insertion loss, excess loss, margin, and PON

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Comprehensive Guide to Optical Splitters

An optical splitter is a crucial passive fiber optic device that splits and combines optical

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Tutorial of Optical Splitter Loss Test

Optical splitters are widely used in passive optical networks. Splitter loss is an important parameter of fiber optic

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How to Test the Loss of Optical Splitter?

Start by connecting a launch reference cable to the optical light source with the correct wavelength (since some

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PLC Splitter and download the loss chart of PLC splitter

Optical splitters, including FBT (Fused Biconical Taper) couplers and PLC (Planar Lightwave Circuit) splitters, are

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What Is an Optical Splitter?

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

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Operation, Maintenance & Calibration of a Fiber Splitter

Performance Testing: Perform regular performance tests using optical power meters or other recommended testing equipment.

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How to Test Optical Splitter Loss With Optical Power Meter & Light ...

For other 1xN optical splitters, e.g. 1x32 splitter, this test method can also be used. Just set the light source up on the

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Testing a balanced PON Splitter with CertiFiber® PRO

The CertiFiber® Pro has an operational mode called “Loopback” that can be employed to test optical splitters, no matter whether

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How to test fiber optic splitters or other passive devices

Some splitters use optical integrated components, so they can be true splitters and the loss in each direction may

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Comprehensive Introduction of Fiber Optic Splitter

Fiber optic splitter is significant in helping users maximize the performance of optical network circuits. This article will

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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

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

This guide focuses on two critical aspects of optical splitters that define FTTH performance: split ratios (how signals

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Optical Splitter Loss Calculator

Optical Splitter Loss Calculator the quick $10 \cdot \log_{10}(N)$ estimate, plus your datasheet excess. A passive optical splitter divides an

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How to calculate and measure fiber optic splitter loss□

Let's explore the fiber optic splitter attenuation loss from the optical Wavelength, insertion

Contact Us

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