

How to Choose a Fiber-to-the-Home Splitter



Article Overview

Choosing the right FTTH splitter involves selecting the appropriate type, split ratio, insertion loss, wavelength compatibility, and packaging to ensure reliable, scalable, and cost-effective network performance.

Key Considerations for FTTH Splitter Selection

1. Splitter Type: PLC vs FBT

- PLC (Planar Lightwave Circuit) splitters are highly uniform, compact, and ideal for large split ratios (e.g., 1×16, 1×32), offering consistent performance across all outputs .

- FBT (Fused Biconical Taper) splitters are lower-cost and suitable for small split ratios (e.g., 1×2, 1×4), but their output uniformity decreases as the split ratio increases .

2. Split Ratio

- The split ratio determines how the optical power is divided among outputs.

Common ratios include 1×2, 1×4, 1×8, 1×16, and 1×32 .

- Higher split ratios reduce the optical power per output, which can affect signal quality and power margin. Choose a ratio that balances network scalability with optical budget .

3. Insertion Loss

- Insertion loss is the optical power lost during splitting. Typical values:

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Types of Optical Fiber Splitters You Should Know About

This guide covers what optical fiber splitters are, the main types of optical fiber splitters you should know about, how

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The answer lies in one of the most important passive components in modern fiber networks-the optical splitter. An

Contact Us

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