

# The function of a 10 Gigabit optical splitter



## Overview

By dividing a single optical signal from a central Optical Line Terminal (OLT) into multiple outputs for Optical Network Terminals (ONTs) at users' homes, splitters eliminate the need for dedicated fibers to each residence—slashing infrastructure costs while scaling network reach. An Optical Splitter, also known as a beam splitter, is a passive optical device that divides a single input optical signal into two or more output signals. Conversely, it can also combine multiple signals into one. Optical splitter. Where splitters are placed in the network can make significant impacts on fiber counts, network cost and deployment time and operational steps, such as customer onboarding and maintenance. One important note is that splitting architectures should be seen as tools that can be mixed and matched to. The trick is how that single signal gets divided. That's where splitters come in.



## Article Content

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A single optical fiber from the OLT connects to a passive optical splitter that is located near an end user's premises. The optical splitter divides optical power into n separate paths to end user.

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But behind the scenes, one key factor makes it all possible: optical splitters. At Tellabs, we like to think of optical splitting as a clever way of letting everyone share the same light—no one ...

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What Is an Optical Splitter?

Optical splitters enable a signal on an optical fiber to be distributed among two or more fibers. Since fiber splitters contain no electronics nor require power, they are an integral component ...

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Fiber-optic splitter

It is an optical fiber tandem device with many input and output terminals, especially applicable to a passive optical network (EPON, GPON, BPON, FTTX, FTTH etc.) to connect the main distribution ...

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It offers advantages in terms of cost, fiber count and duct space in comparison to home run configurations. It also provides better OLT and splitter efficiency/utilization than distributed networks. ...

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