Each port of the optical splitter is bound to a user

Overview

The optical splitter divides optical power into n separate paths to end user. 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. This guide. In a PON network, the splitter which is located between OLT and ONU functions as a traffic hub, adeptly managing the flow of optical signals. It operates like a sophisticated intersection, directing the singular flow of optical fibers to various users or devices, ensuring the efficient circulation. Centralized splitting means that the optical splitter between the optical line terminal (OLT) and the optical network unit (ONU) is parallel, and the basic form is “OLT→optical splitter→ONU”, in which the optical splitter ratio is usually 1:32. — (March 5, 2025)—The Fiber Broadband Association (FBA) announced the release of its latest resource in its Fiber 101 Series, “ Introduction to Passive Optical Network.

Article Content

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Knowledge Base

The Optical Splitter merely divides the optical power into N separate paths to the users. The optical paths can vary between 2 to 128. From the Optical Splitter, a single mode (SM) fibre...

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Contact Us

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