

OLT optical module transmission rate



Article Overview

OLT optical modules support transmission rates ranging from 1.25 Gbps to 50 Gbps depending on the PON standard and module type.

Transmission Rates by PON Standard

- EPON (Ethernet PON): Symmetric 1.25 Gbps upstream and downstream, commonly used in FTTH deployments .
- GPON (Gigabit PON): 2.5 Gbps downstream and 1.25 Gbps upstream, offering higher efficiency for residential and business access .
- XGS-PON (10G Symmetric PON): 10 Gbps upstream and downstream, suitable for high-bandwidth applications like enterprise access and 5G fronthaul .
- 25G-PON: 25 Gbps rate, targeting ultra-high-capacity networks and future 5G deployments .
- 50G-PON: 50 Gbps, currently under standardization and commercialization for ultra-high-speed access .

Module Form Factors and Compatibility

OLT optical modules come in various form factors that influence their supported rates:

- SFP (Small Form-factor Pluggable): Early PON equipment, typically supporting 1G or 2.5G rates .
- SFP+ 22PIN / 20PIN: Enhanced modules for 10G PON (XGS-PON) deployments .

Article Content

What's the OLT (Optical Line Terminal)?

Learn how OLT works in GPON and FTTH networks. Covers OLT architecture, upstream/downstream process,

OLT (Optical line terminal)

The OLT typically consists of three major components: the optical interface, the switching fabric, and the network

Optical line termination

An optical line termination (OLT), also called an optical line terminal, is a device which serves as the service provider endpoint of a

What is OLT? How many types are there?

10G EPON OLT: Supports 10G EPON technology, with a maximum downstream rate of 10Gbps and upstream rate of

EPON OLT SFP Module, PX20+++ Class 1.25G SC Optical Module,

What data rate does this module support? This 1.25G EPON Module supports 1.25Gbps upstream and 1.25Gbps downstream

Difference between GPON ONU optical module and GPON OLT

The packaging type of GPON OLT optical module is SFP, SC interface, the transmission rate is 2.5G/1.25G, the transmission

OLT vs ONT - What's the Difference?

In fiber-optic networking, OLT (Optical Line Terminal) and ONT (Optical Network Terminal) play critical roles in Passive

Exploring the Functions of GPON OLT and ONT in

Learn about the functions of GPON OLT and ONT in an optical line terminal network.

Detailed Explanation of Key Parameters for OLT Optical transceivers

Selecting an OLT optical transceiver requires comprehensive consideration of multiple technical indicators, including

Getting Started With OLT Network Configuration, Cisco Catalyst PON ...

About Service Profiles How to Configure Service Profiles About Service Profiles A Gigabit passive optical network

Defining OLT: Optical Line Terminal

An Optical Line Terminal (OLT) is a fundamental element within optical communication networks, serving as a hub that facilitates the

Detailed Explanation of Key Parameters for OLT Optical transceivers

This article systematically introduces the main categories and technical characteristics of OLT optical transceivers

How to Choose the Right Optical Transceiver Module for You in 2025

Learn how to select the ideal optical transceiver module for your network based on transmission distance, data rate, wavelength, and

A Brief Introduction To GPON Modules

OLT (Optical Line Terminal): It is mainly installed at the central control station, with a transmission rate of TX

Optical Line Terminals Selection Guide: Types, Features ...

Optical line terminals, also called optical line terminations (OLTs), serve as endpoints for passive optical networks (PONs). They

AirLive GPON OLT SFP C+++/C++++

Overview The GPON OLT Transceiver module is designed for Gigabit Ethernet Passive Optical Network (GPON) transmissions over

A Brief Introduction To GPON Modules

Figure 1 GPON OLT Module GPON supports a maximum transmission rate of 2.5Gbps with an SC interface. Like all

Explanation of Optical Module Parameters

Considering that some newcomers to optical modules may not understand the letters on the optical module or the

A Comprehensive Guide To GPON OLT

The GPON OLT is key to passive optical networks. It manages and distributes data as the central control point. Its

What is OLT (Optical Line Terminal)? Types, Features & Applications

As internet usage becomes deeply integrated into modern life, high-speed and reliable connectivity is more critical than

What is the transmission rate of the optical module?

When selecting an optical module, in addition to considering the transmission rate, you also need to consider factors such as

Airlive XG(S)_OLT SFP+ N1_SpecSheet

The Optical transceiver module is designed for low-cost point-to-multipoint (P2MP) Fiber to the Home (FTTH), Business or Curb

FS Community

Hier sollte eine Beschreibung angezeigt werden, diese Seite lässt dies jedoch nicht zu.

GPON OLT C+ Optical Module Spec Sheet

Features & Benefits Supports ITU-T G.984.2 GPON OLT C+ application Single fiber bi-directional data links with symmetric

OLT and ONT

OLT and ONT – what are their roles in GPON network? OLT (Optical Line Terminal) OLT and ONT? Lets start with OLT then. The

What Are the Key Parameters of Optical Modules

Understand the key parameters of optical modules, including transmission rate, distance, wavelength, and fiber

Contact Us

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