

Types of OLT optical modules in GPON



Overview

SFP GPON modules come in two power classes: SFP OLT modules (operator side) and SFP ONU (subscriber side) are distinct and not interchangeable. An SFP GPON OLT TX module at 1490 nm is designed to be inserted into the OLT, while an SFP ONU TX at 1310 nm is installed in the subscriber. In today's rapidly evolving optical networking landscape, GPON (Gigabit Passive Optical Network) technology stands as the mainstream solution for delivering fast, stable, and high-capacity data access. There are no specific requirements for this document. This document is not restricted to specific software and hardware versions. In this blog post, we'll provide an introduction to GPON optical modules and explore the key classification standards that. Optical Line Terminals (OLTs) are critical components in fiber-optic communication networks, particularly in Passive Optical Networks (PONs).



Article Content

Nov 02, 2025

Introduction to GPON Optical Modules and Their

In this blog post, we'll provide an introduction to GPON optical modules and explore the

Apr 13, 2026

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

Mar 27, 2026

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

The full form of OLT is optical line terminal, which is a device used to connect the optical fiber and transfer signals. It's

Sep 11, 2025

The Ultimate Guide to GPON OLT: Architecture, Backplane

For network architects, service providers, and systems integrators, the selection of a GPON Optical Line Terminal (OLT)

Feb 13, 2026

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

Jun 28, 2026

What Is an OLT? | Definition, Function & Role in GPON

Learn how OLT works in GPON and FTTH networks. Covers OLT architecture,

Dec 13, 2025

Passive optical network

Passive optical network A fiber optic cable assembly with SC APC connectors, as commonly used to link

Jul 01, 2026

PON Module Parameters Guide: How to Choose the Best GPON & EPON Modules

Discover key PON module parameters for selecting the best GPON and EPON modules. Understand their impact on

Apr 16, 2026

Guide to Optical Line Terminal (OLT) Classifications:

Explore the different classifications of OLT equipment, understanding each type's unique

Nov 18, 2025

GPON OLT Basics and Beyond: A Comprehensive Introduction

This article explores the technical foundations, working principles, key features, and application scenarios of GPON

Jun 28, 2026

Optical Modules in OLT vs. Switches: Types and Differences

OLT (Optical Line Terminal) and switches are critical devices in optical communication networks, but their optical

May 30, 2026

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

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

Sep 19, 2025

Understanding PON, GPON, EPON, OLT, ONU and PON Optical Module

What is PON Optical Module? PON fiber optic module is a high-performance fiber optic module used in PON system,

May 12, 2026

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

May 13, 2026

The Comprehensive Guide to PON Architecture: Mastering OLT,

Comprehensive guide to Passive Optical Networks (PON), covering OLT, ODN, ONU/ONT, GPON/XGS-PON/NG

Dec 24, 2025

GPON OLT Basics and Beyond: A Comprehensive Introduction

In today's rapidly evolving optical networking landscape, GPON (Gigabit Passive Optical Network) technology stands

Sep 22, 2025

EPON, GPON, 10G EPON, 10G GPON OLT: How do They Work?

OLT downlink ONU, before the two connected to the splitter. To meet different application scenarios, the OLT works

Sep 15, 2025

GPON ONU/ONT and OLT: PON Architecture | Elfcam

SFP OLT modules (operator side) and SFP ONU (subscriber side) are distinct and not interchangeable. An SFP

Jan 20, 2026

What are the different types of olt?

There are several types of OLTs, each designed to cater to different network requirements and

Jan 06, 2026

Understand GPON Technology

This document describes the Gigabit Passive Optical Network (GPON) technology and how it functions.

May 19, 2026

Understanding OLT, ONU, ONT and ODN in PON

OLT supports bandwidth allocation that allows making smooth delivery of data float to the OLT, which usually arrives

Aug 06, 2025

Exploring the Functions of GPON OLT and ONT in

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

Oct 24, 2025

GPON SFP Transceivers in Detailed Introduction

GPON SFP is the optical module applied in OLT and ONT or ONU for passive optical networks. Read on to have a

Nov 15, 2025

The Role of GPON ONU (ONT) and GPON OLT in Fiber Optic

Learn how GPON ONU (ONT) and GPON OLT enable high-speed fiber optic communication. Discover their roles,

Jul 22, 2026

What are the different types of olt?

XG-PON (10-Gigabit-capable Passive Optical Network) OLT XG-PON is an advanced version of GPON, offering higher data rates to

Feb 15, 2026

GPON SFP Modules Explained: Types, Applications, and Benefits

GPON SFP OLT (Optical Line Terminal) and GPON SFP ONU (Optical Network Unit) are two key devices in a GPON

Contact Us

For more information, pricing, or custom solutions, please contact us:

Website: <https://ntmmgroup.co.za>

Email: sales@ntmmgroup.co.za

Phone: +27 82 471 2596

Address: Unit 7, Optic Park, 24 High-Tech Lane, Century City, Cape Town, 7441, South Africa

This document is for informational purposes only. Specifications subject to change without notice.

