OLT3072 modular system, Up to 3072 subscribers



The Optical Line Termination (OLT) is a headend that distributes IP services over optical fiber using the GPON protocol. It is in charge of managing and adapting the services to the subscribers' profiles and their devices, allowing the distribution and commercialization of Quad Play signals (Internet, TV, telephony, etc).
Specifically designed for the residential environment, OLT3072 can serve up to 3072 subscribers with total rates of 2.5 Gbps/1.24 Gbps (downstream/upstream) on each GPON port.
The OLT is a modular system, which consists of the frame with a power supply unit (ref. 769420), 3 slots to install the 16 PON boards (ref. 769422), and 2 slots to install the back plane switch 2x10 Gbps (ref. 769421).

Ref.	769421
Logical ref.	OLTSWITCH10
EAN13	8424450187135

Other features	
Module type	2x10 Gbps Back plane switch

Packaging info	
Box	1 pcs.

Physical data	
Net weight	1,500.00 g
Gross volume	8.75 dm³
Gross weight	1,500.00 g
Width	405.00 mm
Height	30.00 mm
Depth	220.00 mm
Main product weight	1,500.00 g

Highlights

- User friendly configuration via WEB
- Easy CLI (Command Line Interface) configuration option
- Remote management and monitoring

- Up to 60 km range
- SFP (ref. 769140, 769411, 769412 or 769413) compatible
- Up to 3 boards with 16 PON ports for up to 64 users each
- Up to 2 modules of Gigabit Ethernet ports for 2x1 GbE Uplink traffic
- AC/DC adapter included
- 19"-rack installation, 3U height

Discover

GPON, the optical solution for fast and efficient connectivity

GPON (Gigabit Passive Optical Network) is a technology used to provide access to the internet, telephony, television, and other services through a passive fiber-optic network. It is the predominant choice in modern infrastructures due to its high data transmission rate (up to 2.5 Gbps download and 1.25 Gbps upload), efficiency, reliability, and ability to cover long distances without signal loss.

It is based on a point-to-multipoint architecture. In this configuration, a central unit called the Optical Line Terminal (OLT) sends an optical signal via fiber to the end-user equipment, known as the Optical Network Terminal (ONT). To distribute the signal efficiently, passive optical splitters are used, allowing a single fiber to be divided into several fibers, reaching multiple users with less cabling.

Communication in GPON employs wavelength division multiplexing (WDM) to separate the downstream channel (1490 nm), which transmits data from the OLT to each ONT, and the upstream channel (1310 nm), which goes in the opposite direction. Additionally, time division multiplexing (TDM) is used so that communication with each ONT takes place during a specific time slot, thus avoiding interference. The transmitted data is also encrypted, ensuring the privacy and security of each user.

GPON is a comprehensive solution that goes beyond fast and secure connectivity, also offering other benefits:

- Reduction of maintenance costs thanks to the absence of active components in the distribution and the long lifespan of fiber optics.
- Integration of multiple services over a single network, such as internet, telephony, television, IPTV, casting, video surveillance, and many more.
- It enables connectivity for hundreds of users without greatly increasing investment, as it does not require network devices such as switches.