Televes reserves the right to modify the product

OLT512EVO module, Up to 512 subscribers

The OLT512EVO Optical Line Termination has been designed to distribute IP services over optical fiber using the GPON protocol.

Specially developed for its use in the Hospitality sector, it has the powerful capability to deploy up to 16 services per ONT, allowing hotel establishments to offer a greater number of entertainment options to guests.

This headend can serve up to 64 subscribers over a single fiber in each of the PON interfaces, making it possible to connect up to 512 optical subscriber terminals in total.

The OLT512EVO is equipped with the following ports: 8xPON + 4xGbE + 4x10GbE/GbE (SFP+) + 2xGbE (administration ports). It also presents total Downstream/Upstream rates of 2.488Gbps/1.244Gbps on each GPON port.

Ref.	769403
Logical ref.	OLT512EVO
EAN13	8424450201817

Packing

Box	1 pcs.

Physical data

Net weight	3,895.00 g
Gross weight	3,895.00 g
Width	483.00 mm

Height	44.00 mm
Depth	418.00 mm
Main product weight	3,900.00 g

Highlights

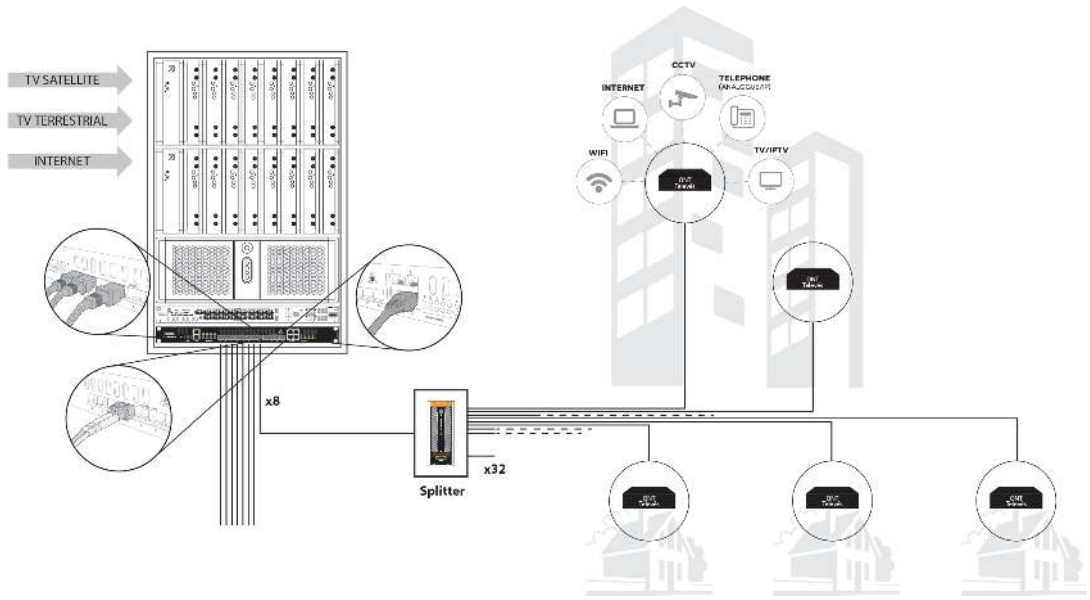
- Specially designed for Hospitality environments
- High availability network deployment
- It allows reaching up to 16 services on the same ONT/ONU
- Possibility of transporting TV signals (RFoG) and data over the same fiber
- Up to 60 km range
- Management via WEB, SNMP, CLI (Command Line Interface)
- DHCP server included
- It includes significant security features like RADIUS (Remote Authentication Dial-In User Service) authentication, TACACS+ authentication, QoS mapping and Network Access Server (NAS)
- Traffic Shaping management technique available
- It includes two Hot-swappable redundant embedded power supplies
- 100% European design, quality, and manufacturing

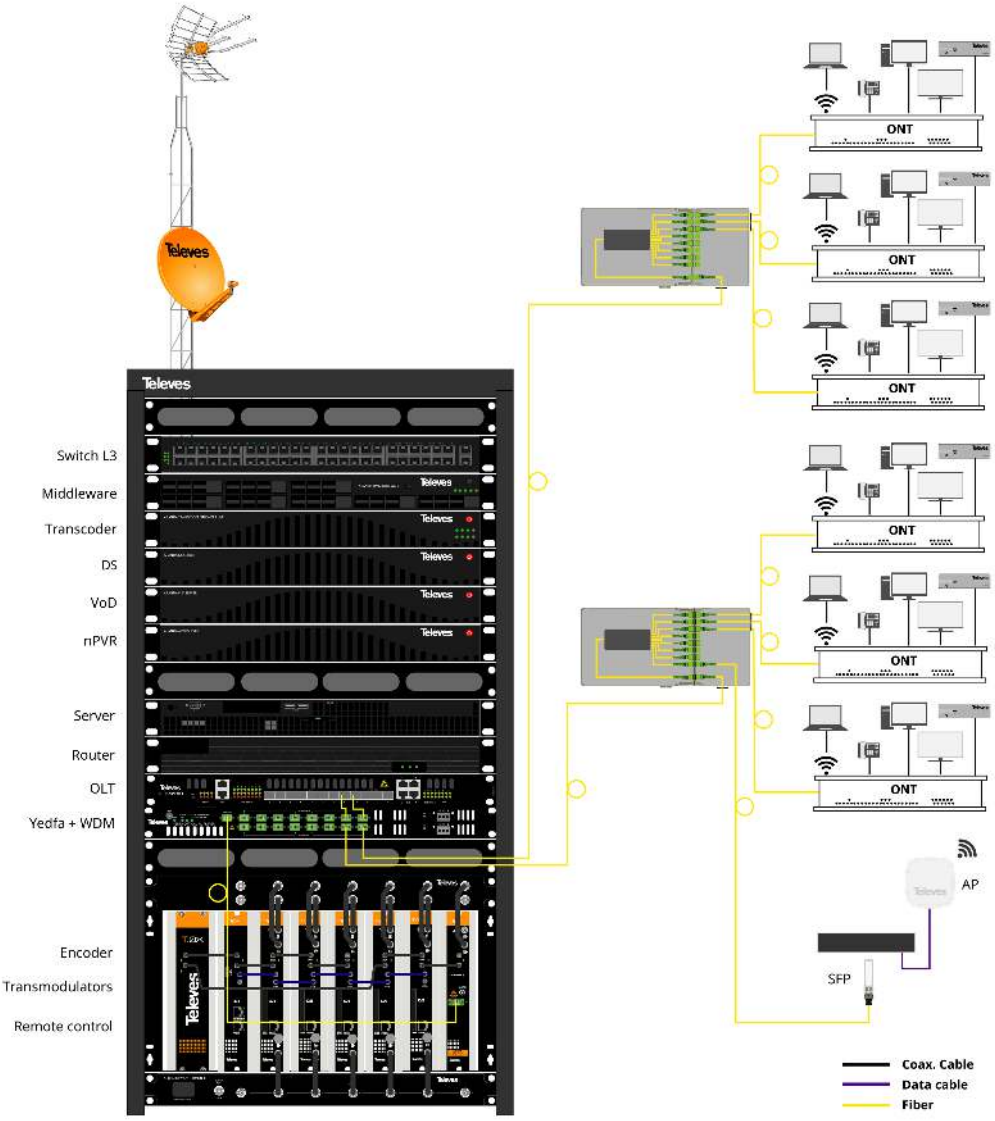
Main features

- Total capacity of 512 subscribers
- 8 full-duplex PON ports, with capacity of up to 64 ONT/ONU in each port
- Gigabit Ethernet ports for Uplink traffic: 4x SFP+ 10GBase-X ports / 4x 10/100/1000Base-T ports / 2x 10/100/1000Base-T ports (dedicated to administration)
- Compatible with SFP type B+ (ref. 769410) and SFP type C+ (ref. 769414 and 769413)
- Energy-Efficient Ethernet (EEE), ActiPHY and PerfectReach power management
- Adaptive FAN control and temperature control

- LED status indicators
- 19"-rack installation, 1U height

Application example





Features

Flexibility in deployment and configuration of services

Minimum restrictions in the management of network elements

The OLT512EVO can offer all the advantages of GPON technology, making it possible to have all the elements of the passive fiber optic network under control. The management of the installed devices can be done via Web, SNMP or CLI, allowing the users to choose the one that best suits their particular situation.

In order to achieve a quicker and simpler system start-up, this device allows the exchange of connected ONTs/ONUs between PONs, as they are not strictly linked to a specific one. In addition, thanks to its profile-based service provisioning capability, it allows the same services to be provided to a set of ONTs at the same time and in a single step.

User-friendliness

Simple and consistent web interface

Designed for a widespread use, the OLT512EVO features a visual, intuitive and simple-to-use interface, specially developed to meet the requirements of the hotel establishment.

Its powerful software allows a massive and centralized management of the GPON network elements, providing detailed network information in a clear and fully visible way.

Robustness and energy efficiency

Accurate operation at all times

With its remarkable hardware features, the OLT512EVO has been designed to work in the most demanding environments. It features two Hot-swappable redundant embedded power supplies with UL certification, protecting the equipment in the event of power failures and ensuring that it operates correctly.
The advanced management and energy saving capabilities of this device include Energy-Efficient Ethernet (EEE), adaptive FAN and temperature control, as well as the Cold and cool start function.

Savings on additional equipment

Optimized hardware for reduced use of peripheral devices

This compact headend provides advanced hardware features with which the acquisition of additional equipment is not essential.

Thanks to its 4 GbE ports, the installation of SFP devices is not necessary for optimal network operation. In addition, its two Hot-swappable redundant embedded power supplies contribute to the best performance of the device without the installation of an external power supply. The connection to an external router is also not necessary, as this OLT has an integrated DHCP server for the propagation of services and the configuration of the ONTs.

Technical specifications

GPON		
ITU-T G.984.x recommendation (GPON - OMCI)		
AES (Advanced Encryption Standard)		
ITU-T G.984 FEC (Forward Error Correction)		
Number of ONT in each PON (512 subscribers) recommended		>64
Range	km	60
PON Downstream bit rate	Gbps	2.488
PON Upstream bit rate	Gbps	1.244
DBA (Dynamic Bandwidth Allocation)		
IGMP		
IGMPv2 e IGMPv3		
IGMP Snooping		
IGMP Proxy Querier		
IPv4 IGMP and IPv6 MLD		
Filtering based on multicast IP addresses destination.		
Up to 256 different IP addresses		
L2 Switching		
IEEE 802.1Q VLAN tagging		
Switch Metro Ethernet		
MAC addresses		<32K
Loop guard		
MSTP (Multiple Spanning Tree Protocol), RSTP (Rapid Spanning Tree Protocol) and STP (Spanning Tree Protocol)		
L3 Switching		
DHCP: support for DHCP relay packets		
IPv4/IPv6 Unicast Software based on static routes		
Unicast Hardware based in L3 Static Routing		
OSPF v2 for IPv4		
Security		
NAS (Network Access Server)		
MAC-based authentication		
QoS assignment		
Guest VLAN		
RADIUS accounting		

MAC address limit		
Robustness and power management		
Hot-swappable redundant embedded power supplies		
Cold and cool start		
ActiPHY		
Management		
DHCP server		
HTTPS/HTTP, CLI, Telnet, SSH, SSHv2		
IPv6 management		
System syslog		
General		
Power supply	VAC	110...230
Max. power consumption	W	48
Max. current consumption	mA	600