



SKU: 81.11C-OLT2-40

Category:

# FlexSym Optical Line Terminal Two (OLT2)

The Tellabs FlexSym® OLT2 Optical Line Terminal is a multi-purpose Optical Line Terminal (OLT) enabling open, simple, and scalable connectivity for wired and wireless networks over fiber and copper networks. It supports multiple technologies, high bandwidth, and a compact size to enable flexible design options. FlexSym OLT2 has optically connected distributed endpoints that can be GPON or symmetrical 10G XGS-PON. In addition, it offers multiple point to point 10G interfaces.

## Features

- 2 PON interfaces and up to 128 ONTs supporting 64:1 split ratio
- Equip with 10G symmetrical XGS-PON or G-PON service
- 4 SFP+ 1G/10G interfaces for up to 40GbE in network connectivity
- DC Powered or redundant external AC Power adapters
- Front to back airflow with quiet operation
- Capable of being deployed in a daisy chain style fashion
- Same software and feature support as all Tellabs OLTs
- Allows for pay-as-you-grow model

## Highlights

Tellabs OLT2 scales from 2.5G G-PON to symmetrical 10G XGS-PON. Optical distribution network splits can be designed with up to 1:64 split ratio with 10km reach. With proper optical budget and split ratio design, the extended optical reach can be as far as 30 km with 1:16 split ratio.

## Stability

The Tellabs OLT2 provides industry leading fiber route diversity and geographically dispersed OLTs with FSAN-based Type-B PON redundancy. This redundancy provides for port-to-port, card-to-card and OLT-to-OLT protection

## Security

Industry leading bi-directional AES128 Encryption with churning key every minute is provided for ultimate security – that's two-way encryption securing the downstream and upstream traffic.

## Simple

All features and functionality can be defined in software and dynamically allocated, based on real-time needs. Being controlled by the Tellabs Panorama PON Manager helps speed installations and daily operations. Centrally controlled by the Tellabs Panorama PON Manager, the Tellabs OLT2 supports quick provisioning using global profiles, and offers smart troubleshooting tools, all of which allow for speedy moves, adds and changes for everyday operations.

## Services

Tellabs OLT2 connects contemporary voice, video, data, wireless access, access control, security, surveillance, building environmental and building automation inside buildings and across extended campus. This is inclusive of must-have enterprise features and functionality such as, bridging, access security, mission critical reliability and operational efficiencies.

## Powering

Tellabs FlexSym OLT2 supports dual power inputs for redundancy using Tellabs standard external 150W power supplies. Alternately, the OLT2 can be powered by industry standard remote power systems including those offered by Tellabs.

## Mounting

The OLT2 has various mounting option to further enhance its flexibility as a small OLT. The OLT comes standard with the capability of wall mount or tabletop. With an available rack mount kit, one or two OLT2 can be mounting in a single 1RU, 19 rack mount space.

## Specifications

- Weight: 6 lb/2.7 kg
- Depth: 11.3 in/28.7 cm
- Width: 7.68 in/19.5 cm
- Height: 1.75 in/4.4 cm

## Interfaces

- PON: Two (2) either G-PON or 10G XGS-PON (sold separately)
- Ethernet: Four (4) SFP+ (sold separately)

## Power

- Max draw: 81W
- Power feeds: Dual 48 V power feeds, Remote Power input

## LED Indicators

- Dual STAT 1-2 PON
- SFP+ 1-4 Link and Low Power LEDs
- STAT OLT Management
- STAT PON CPU

## Passive Optical Network

- Compliant with ITU-T G.9807.1 (physical layer), G.987 (.2/.3/.4) and G.988.1 standards
- Two (2) PON ports
- Up to 64-way optical split
- 512 UNIs per PON port
- Flexible mapping of GEM ports and TCONT with priority queue-based scheduling
- Activation with automatically discovered Serial Number (SN) and password
- AES-128 bi-directional encryption with 60 second churning of keys
- Forward Error Correction (FEC)
- IP DSCP to 802.1p mapping
- Support for multicast GEM port
- PON Protection Groups (PPG) with PON Path Protection

## ITU-T G.9807/G.987 10G PON

- Compliant with ITU-T G.9807.1 (physical layer), G.987 (.2/.3/.4) and G.988.1 standards
- Connectors: SC UPC XFP module
- Wavelength downstream: 1580 nm
- Wavelength upstream: 1280 nm
- 9.95328 Gbps burst mode upstream
- 9.95328 Gbps downstream receive
- Maximum split ratio 1:64 (reach 6.2 miles/10 km)
- Maximum reach: 18.5 miles/30 km (split ratio 1:16)
- Optical budget: 28 dB (Class B+)

## ITU-T G.984 2.5G PON

- ITU-T G.984 compliant
- Connectors: SC UPC XFP module

- Wavelength upstream: 1310 nm  $\pm$  50 nm
- Wavelength downstream: 1490 nm  $\pm$  10 nm
- Maximum split ratio 1:64 (reach 6.2 miles/10 km)
- Maximum reach: 18.5 miles/30 km (split ratio 1:16)
- Optical budget: 28 dB (Class B+)

## Compliance

- CE and RoHS 6 of 6
- UL/EN/IEC-62368
- CAN/CSA C22.2 No 62368-1
- EN61000-3-2 and EN6100-3-3
- EN 300 386
- FCC 47 CFR Part 15 SUBPART B
- ICES-003

## IP/Ethernet Network

- 262,144 MACs per slot
- 64,536 Routes / 262,144 Hosts
- 24,576 ACLs per card
- 32,768 Queues per card
- 64,536 Counters per card
- 64,536 Meters per card
- 40Gbps through-put
- Ethernet IEEE 802.3, Gigabit Ethernet IEEE 802.3z and 10Gigabit Ethernet IEEE 802.3ae
- NAC appliance integration and COA support for ForeScout CounterACT, Juniper Unified Access Control (UAC), Cisco Identity Services Engine (ISE), HP/Aruba ClearPass Policy Management, Portnox, and Microsoft Network Policy Server (NPS)
- Dynamic ARP Inspection (DAI)
- MAC Authentication Bypass (MAB)
- Private VLAN support
- Access Control Lists (ACL)
- SNMP Agent
- IPv4 and IPv6
- Syslog: RFC 5426
- Priority Queuing: RFC 1048
- IGMPv3 Snooping and Proxy: RFC 3378 and RFC 2238
- Flow Control: IEEE 802.3x
- Port Authentication Entity: IEEE 802.1X
- Port-based Network Access Control: IEEE 802.1X
- Virtual LANs: IEEE 802.1Q and Q-in-Q
- Traffic Classification: IEEE 802.1p
- Multiple Spanning Tree Protocol (MSTP): IEEE 802.1s
- Rapid Spanning Tree Protocol (RSTP): IEEE 802.1D
- Link Aggregation Protocol: IEEE 802.3ax

- LLDP/LLDP-MED: IEEE 802.1AB
- Sticky MAC

## Management

- Tellabs Panorama PON Manager
- Command Line Interface (CLI)
- Remote firmware upgrade and automatic rollback

## Software Support

- Holds two versions of software with image integrity checking and automatic rollback
- Minimum base software SR32.0 and higher

## Installation

- Tabletop
- Wall-mount
- Optional 19 rack options with 1 or 2 units in 1RU space

## Environmental

- Temperature:
  - Internal Power Supply: 32°F to 104°F (0°C to 40°C)
  - Network Power Supply: 14°F to 140°F (-10°C to 60°C)
- Relative Humidity: 5% to 95%, noncondensing
- Front to back airflow

## Ordering Information

- Tellabs OLT2: 81.11C-OLT2-40
- 19" Rack mount kit: 81.11K-OLT2-RACK19
- Low voltage remote power cable: 81.11W-2W8M
- 150W Power adapter mounting bracket: 81.11K-BKONTPS150
- Power adapter: 81.11P-PWIL150W
- Power cord: 81.11W-C13TYPB-3
- XFP G-PON module: 81.11T-XFPGPON-IT ordered separately
- XFP XGS-PON OLT module: 81.11T-XFPXGSPON ordered separately

## General

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