SKU: 81.11C-OIU8-R6
Category:

# FlexSym Optical Interface Unit Eight (OIU8)

The Tellabs FlexSym® Optical Interface Unit Eight (OIU8) is an 8-port Passive Optical Network (PON) service module. The Tellabs FlexSym OIU8 can simultaneously delivers flexible extended Ethernet connectivity for a true enterprise Passive Optical LAN using ITU-T 984 G-PON and ITU-T G.9807/G.987 XGS-PON symmetrical 10G technologies.

# Features

- Open-source and standards-based Software Defined Networking (SDN) ready, plus NG-PON2 capable with future software
- 8-port PON service module with XFP selectable ITU-T 984 G-PON 2.5G or ITU-T G.9807/G.987 XGS-PON symmetrical 10G connectivity
- XGS-PON bi-directional AES128 Encryption with churning key with Tellabs FlexSym ONT205
- Compatible with QOIU7 for cost-effective and graceful migration from G-PON 2.5G to XGS-PON 10G and then NG-PON2 40G
- Enterprise data including wireless access, access control, security, surveillance, building environment and automation
- Environmentally-hardened for remote deployments in areas with no air conditioning nor heating

# Highlights

## Overview

The Tellabs FlexSym OIU8 supports both ITU-T 984 G-PON and ITU-T G.9807/G.987 XGS-PON 10G connectivity down to the Optical Network Terminals (ONT). It provides flexible choices for designing a modern enterprise network to exactly align with contemporary connectivity such as IoT, wireless, open/shared office and smart buildings demands. Efficiently converge all enterprise connectivity by leveraging fiber cabling's limitless capacity deep into your buildings and campus by exactly equipping the OIU8 with the precise 2.5G and 10G speed that is warranted – thus, minimizing energy and costs.

## Scalability

Tellabs OIU8 scales from 2.5G G-PON to symmetrical 10G XGS-PON to 40G NG-PON2. 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 with1:16 split ratio. Further capacity scalability can be achieved since it is NG-PON2 capable with future software upgrade. It is also compatible with QOIU7 for side-by-side cost-effective operations.

## Stability

The Tellabs OIU8 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.

## Software Defined LAN

The Tellabs OIU8 can support open-source and standards-based SDN with future software upgrade.

## 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 OIU8 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 OIU8 service card 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.

## Specifications

### Physical

- Height: 10.8 in/27.4 cm
- Width: .87 in/2.2 cm
- Depth: 9.2 in/23.4 cm
- Weight: 1.1 lb/.49 kg

### Passive Optical Network

- Compliant with ITU-T G.9807.1 (physical layer), G.987 (.2/.3/.4) and G.988.1 standards
- Eight (8) PON ports per card
- 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

### 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 3 50 nm

- Wavelength downstream: 1490 nm 3 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

- NEBS
- UL
- FCC

## 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
- 80Gbps through-put

## Power

- Max power: 90 W

## LED Indicators

- XFP 1-8 Low and Link
- STAT

## Management

- Tellabs Panorama PON Manager

## Software Support

- Holds two versions of software with image integrity checking and automatic rollback
- Minimum base software SR31.0 and higher

## Installation

- OLT1134 and OLT1134AC (ESU32)
- OLT1150 and OLT1150E (ESU2)
- OLT6 (ESU32)
- QOIU7 compatible

## Environmental

- Relative humidity: 5.0% to 95%, noncondensing
- Temperature: -40° F to 158° F/ -40° C to +70° C

## Ordering Information

- Tellabs OIU8: 81.11C-OIU8-R6
- 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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