FlexSym 205 Optical Network Terminal (ONT205)

[Limited Availability] The Tellabs FlexSym 205 Optical Network Terminal (ONT205) offers 5-ports of Ethernet with options for 1G, 2.5G, 5G and 10G speed connectivity. The Tellabs FlexSym ONT205 provides flexible and symmetrical extended Ethernet connectivity over a passive optical network at 1G, 2.5G, 5G and 10G speeds.

Features & Benefits

- Enclosure's fire retardant plastic passes plenum fire test
- Four (4) 10/100/1000 and one (1) 10G interface with Power over Ethernet support for 4PPoE supporting 802.3af/at/bt
- Overlay ITU 948 G-PON ONTs with ITU 989 XGS-PON 10G ONT on same fiber protecting existing infrastructure investments
- Deliver 10G capacity only where necessary to optimize space, energy and monetary issues associated with 10G
- ONT205 supports 1G, 2.5G, 5G and 10G as needed properly aligning network design with true traffic requirements
- Uses Tellabs' industry-leading software-defined global profiles, traffic management, security, provisioning and traffic management mechanisms
- Management can be server, laptop, tablet, cloud-based and lays the foundation for future software defined networking automation.
- Supports Dante and CobraNet digital audio systems over IP
- Bi-directional AES-128 encryption with 60 second churning of keys

Gallery

Included Highlights

Overview

The Tellabs FlexSym ONT205 offers 5-ports of Ethernet with options for 1G, 2.5G, 5G and 10G speed connectivity. 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 ONT205 with the precise 1G, 2.5G, 5G and 10G speed that is warranted – thus, minimizing energy and costs.

Powering Options

Tellabs ONT205 powering options include both local AC and remote DC. For local AC power, power adaptors are used to transform 120 AC power from the wall plug to 48 DC power delivered to the ONT. The AC power adaptor provides enough power for the ONT to supply up to 140W of PoE power. For the remote DC power option, a centrally located bulk rectifier can be used, and 48 VDC power is delivered over CATx cables or new hybrid fiber/copper cables. Remote powering option uses a centrally located bulk power plant, emergency power and bulk battery back-up.

Power over Ethernet (PoE)

For Power over Ethernet (PoE), IEEE 802.3af PoE, PoE+ IEEE 802.3at (Class-4 negotiations) and IEEE 802.3bt (4PPOE) can be selected. The ONT can support three ports of 4PPoE supporting 802.3af/at/bt. The maximum PoE power when local powered is 140 watts and the maximum PoE power when remote powered is 90 watts.

Mounting Choices

Deliver virtualized Ethernet port extensions deep into enterprise by mounting ONT on wall, floor, ceiling, even in plenum space, hidden inside office furniture, behind façade, on top or underneath desks. Uses same mounting bracket as ONT142R and ONT180C. Interface plate exists to allow mounting to all existing Tellabs brackets.

Advanced IP and Ethernet

Tellabs ONT205 offers industry-leading software-defined traffic management, security, provisioning and quality of service mechanisms. It supports enterprise VoIP connectivity with the latest unified communications systems and all enterprise IP-based video traffic (e.g., entertainment, surveillance, conferencing). Tellabs FlexSym Series enterprise focused means that advanced Ethernet IEEE features, such bridging, LAG, VLAN, ACL, PoE, LLDP, NAC, 802.1x, AS-SIP, and other mush-have protocols are supported that satisfy true enterprise requirements

Ultimate Security

Tellabs FlexSym ONT205 also support industry leading bi-directional AES-128 encryption with 60 second churning of keys.

Centralized Management

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 Panorama PON Manager, the Tellabs ONT205 supports auto-discovery mechanisms, can be quickly provisioned using global templates and profiles, and offers smart troubleshooting tools, all of which allow for speedy moves, adds and changes for everyday operations.

Specifications

Physical

- Weight: 1.1 lbs
- Depth: 5.84 in
- Width: 10.07 in
- Height: 1.86 in

Interfaces

- Four (4) 10/100/1000Base-T Gigabit Ethernet RJ-45 connectors autosensing MDI/MDIX
- One (1) IEEE 802.3bz and 802.3an with 10M/100M/1G/2.5G/5G/10G with auto-negotiation

Power

- BBU Part Number: 81.16G-DSKTPBBU-R6 (does not include the PSU)
- Remote Power Connector: Phoenix
- Dying Gasp support
- PSU Part Number when not using BBU - use PSU 81.11P-PWIL81WM (PSU with Molex)
- Input at ONT (volts): 48–56 VDC
- Consumption Idle (watts): 10 W
- Max PoE Power via local AC power: 140W
- Max PoE Power via remote power: 90W
- AC Adapter Input: 2.0A@100-240VAC, 50-60Hz
- AC Adapter Output: 54V@2.78A (150W)
- Local ONT Power Connector (PSU connector): B-Type
- Local Power BBU Alarm/Monitor Connector: 8-pin
- Local Battery Backup (BBU): optional
- Local Power Supply Unit (PSU): not included
- PSU Part Number when using BBU - 81.11P-PWIL81WH-R5

Passive Optical Network

- Wavelengths: Downstream 1580 nm, Upstream 1280 nm
- 9.95328 Gbps burst mode upstream
- 9.95328 Gbps downstream receive
- ITU-T G.984.2 Amd1 Class B+
- APD receiver and DFB transmitter
- 4-9dBm launch power, -28 dBm sensitivity and -9 dBm overload
- Laser compliant FCC 47 CFR Part 15
- Class B and FDA 21 CFR 1040.10 and 1040.11, Class I
- Flexible mapping of GEM ports and TCONT with priority queue-based scheduling
- Activation with automatically discovered Serial Number (SN) and password
- Bi-directional AES-128 encryption with 60 second churning of keys
- Forward Error Correction (FEC)
- IP DSCP to 802.1p mapping
- Support for multicast GEM port
- Compliant with ITU-T G.9807.1 (physical layer), G.987 (.2/.3/.4) and G.988.1 standards
- SFF-type laser SC/APC connector

IP/Ethernet

- PoE: 802.3af/at, class 0-4, up to 30W per port on all ports
- PoE: Cisco UPoE Support with up to 60W on 3 high power ports.
- PoE: 802.3bt 4PPoE class 5-6, up to 60W per port on 3 high power ports.
- IEEE 802.1x Port-Based Authentication/MAB
- Network Access Control (NAC)
- Virtual switch based on 802.1Q VLAN
- 1024 MAC addresses
- 25 VLANs per Ethernet port
- VLAN tagging/detagging, marking/remarking per Ethernet port
- VLAN translation, trunking and stacking
- QoS and security policies based on VLAN-ID, 802.1p, DSCP
- MAC address limiting to prevent flooding attacks and limiting the number of devices attached to a port
- IPv6 capable for enterprise services
- L2-L4 Access Control Lists (ACLs)
- Upstream ACL rate limiting
- Supports Dante and CobraNet digital audio systems over IP
- IGMP v2/v3 snooping
- Link Layer Data Protocol (LLDP) for autoprovisioning, inventory and PoE power management.

Operations, Administration and Maintenance (OAM)

- Complete service provisioning, such as Ethernet and VoIP
- Alarming, events and performance monitoring
- Remote image download over OMCI as well as activation and rebooting
- Holds two versions of software with image integrity checking and automatic rollback
- Standards-compliant OMCI as defined in ITU-T G.988
- Management Information Base (MIB) manipulation over OMCI by Create, Delete, Set, Get & Get Next commands

Environmentals

- Temperature: 0° C to 50° C
- Relative humidity: 5% to 85%, noncondensing

Compliance

- CE
- UL2043 plenum fire test
- FCC
- UL

LED Indicators

- PON — Link status
- Ethernet link/Activity (per port)
- Ethernet Speed (per port)

Management

- Tellabs Panorama PON Manager
- ONT has no local management access

Software Support

- Minimum base software SR31.0 and higher

Installations

- Cubicle ONT mounts on a desktop, under a desk, on a wall, vertical, horizontal or free-standing – plenum rated for above ceilings
- OLTs supported: OLT1150, OLT1150E, OLT1134AC, OLT1131, OLT6
- Built-in location indicator for easy installation and labeling identification

Ordering Information

- Tellabs 205 ONT: 81.11G-ONT205

General

- The development, release, and timing of features or functionality described for Tellabs' products remains at Tellabs' sole discretion. The information that is provided within this data sheet is not a commitment nor legal obligation to deliver any material, code or functionality.