SKU: 81.11G-ONT180C-T-R6
Category:

180C Optical Network Terminal (ONT180C-TAA)

The TAA compliant Tellabs 180C Optical Network Terminal (ONT) provides high-density gigabit Ethernet connectivity that is a scalable and smart choice for the new enterprise LAN. This evolutionary ONT, which supports the modern office and extended campus environments, can be integrated inside office furniture, secured to a wall, mounted underneath a desk or just be free-standing at a desktop. All 3rd millennium IP-based enterprise services and applications can be delivered, including voice, video, high-speed data, wireless, security, access controls and building automation.

Features

- TAA Compliant
- Tellabs ONT180C Rev E version can support 300 watts of Power over Ethernet delivery when powered by remote DC power.
- Network Access Control (NAC) enables individual user service profiles to automatically follow a user to any port on the Tellabs Optical LAN system, including service profile and security settings
- Eight (8)10/100/1000 Gigabit Ethernet interfaces with Power over Ethernet support for 8-ports of 4PPoE supporting 802.3af/at/bt
- Fast and efficient IP endpoint provisioning, including power management, monitoring and configurations with Link Layer Discovery Protocol (LLDP) Media Endpoint Discovery (MED)
- Data, VoIP, unified communications and IP video in many forms (e.g., entertainment, surveillance, conferencing)
- Operates seamlessly with Tellabs' complete line of OLTs and along side all ONTs
- Supports Dante and CobraNet digital audio systems over IP
- Wireless access points, surveillance, security, automation, access control and other corporate services
- Uses Tellabs' industry-leading software-defined traffic management, security, provisioning and quality of service mechanisms
- Best practice for network design calls for a total number of sixteen (16) ONT180C on the QOIU7 (128 UNIs) and 64 on the OIU8 (512 UNIs)

Highlights

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 Tellabs Panorama PON Manager, the Tellabs 180C ONT supports auto-discovery mechanisms, can be quickly provisioned using global templates and wizards, and offers smart troubleshooting tools, all of which allow for speedy moves, adds and changes for everyday operations.

Powering Options

Tellabs 180C ONT 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. 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. For local powering option, the Tellabs PSU BBU unit with monitoring can be used as a local battery back-up. The ONT180C has both Phoenix and Molex connectors for power.

Power over Ethernet (PoE)

For Power over Ethernet (PoE), the Tellabs ONT180C Rev E (and above) support 802.3bt 4PPoE Type 4 PSE capable of Class 1 through 8 , supplying up to 90W on a single port (71W at the PD) for powering downstream Powered Devices (PD), with 140W total PoE output on AC, and up to 300W

on DC. Tellabs ONT180C Rev D (and below) support pre-standard 802.3bt 4PPoE Type 3 PSE capable of Class 1 through 6 supplying up to 60W on a single port (51W at the PD) for powering downstream PDs, with 140W total PoE output on AC, and up to 140W on DC.

Mounting Choices

Tellabs 180C ONT is designed and tested for a wide variety of mounting scenarios. The 180C ONT can be integrated inside office furniture, secured to a wall or underneath a desk or just be free-standing on a desk top. There is an optional plenum bracket available if mounting in the above ceiling space.

Specifications

Physical

- Weight: 1.1 lbs
- Depth: 6.30 in / 160 mm
- Width: 8.66 in / 220 mm
- Height: 1.34 in / 34.03 mm

Interfaces

- Eight 10/100/1000Base-T Gigabit Ethernet RJ-45 connectors
- Autosensing MDI/MDIX

Power

- Input at ONT (volts): 50-57 VDC
- Consumption Idle (watts): 10W
- Consumption w/o PoE Max (watts): 16W
- Consumption w/PoE Max (Rev E on DC): 316W
- Max PoE Power (Rev E on DC): 300W
- Dying Gasp support
- Phoenix and Molex connectors for power
- Local Power Supply Unit: 81.11P-PWIL150W or 81.11P-PWIL81WM

Gigabit Passive Optical Network

- Compliant to ITU-T G.984 standards
- SFF-type laser SC/APC connector
- Wavelengths: Downstream 1490 nm, Upstream 1310 nm
- 1.244 Gbps burst mode upstream
- 2.488 Gbps downstream receiver
- ITU-T G.984.2 Amd1 Class B+
- APD receiver and DFB transmitter
- 0.5~+5 dBm launch power, -27 dBm sensitivity and -8 dBm overload
- Laser compliant to FCC 47 CFR Part 15
- Class B and FDA 21 CFR 1040.10 and 1040.11, Class I
- ITU-T G.984 compliant framing
- Flexible mapping of GEM ports and T-CONT with priority queue-based scheduling
- Activation with automatically discovered Serial Number (SN) and password

- AES-128 decryption with churning keys
- Forward Error Correction (FEC)
- IP DSCP to 802.1p mapping
- Support for multicast GEM port

IP/Ethernet

- Virtual switch based on 802.1Q VLAN
- 1024 MAC addresses
- 25 VLANs per Ethernet port
- VLAN tagging/detagging, marking/ remarking per Ethernet port (use ports 1-4 for priority tagged services)
- VLAN 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
- Dante and CobraNet digital audio systems over IP
- 8-ports of 4PPoE supporting 802.3af/at/bt
- IEEE 802.1x Port-Based Authentication
- Link Layer Data Protocol (LLDP) for autoprovisioning, inventory and PoE power management.
- Network Access Control (NAC)
- IGMP v2/v3 snooping

Operations, Administration and Maintenance (OAM)

- Standards-compliant OMCI as defined in ITU-T G.984.4 and G.988
- 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

Environmentals

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

Compliance

- CE, FCC and UL certified
- TAA

LED Indicators

- PON Link status
- Ethernet link (per port)
- Ethernet Tx/Rx (per port)

Management

- ONT has no local management access

- Tellabs Panorama PON Manager

Software Support

- Tellabs Panorama PON Manager
- Minimum base software SR30.2 and higher

Installations

- OLTs supported: OLT1150, OLT1150E, OLT1134AC, OLT1131, OLT6, OLT1 and OLT-mini
- Mounting options: zone, wall, desktop, in-wall, enclosure and/or plenum bracket (sold separately)

Ordering Information

- ONT180C TAA Compliant: 81.11G-ONT180C-T-R6
- Power Supply: 81.11P-PWIL150W or 81.11P-PWIL81WM

General

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