SKU: 81.11G-ONT180CHP
Category:

# 180CHP Optical Network Terminal (ONT180CHP)

The Tellabs 180CHP 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.
In addition, the robust metal chassis and superior heat dissipation allow up to 300W of POE to be supplied by the ONT.

# Features

- Supports up to 90W on a single port for powering downstream Powered Devices (PD), with a total ONT power of 300W across all ports.
- 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
- 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
- Supports Dante and CobraNet digital audio systems over IP

# 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 180CHP 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 180CHP 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. The ONT180CHP has both Phoenix and Molex connectors for power.

## Power over Ethernet (PoE)

For Power over Ethernet (PoE), the Tellabs ONT180CHP Supports 802.3bt 4PPoE Type 4 PSE capable of Class 1 through 8, supplying up to 90W on a single port for powering downstream Powered Devices (PD), with a total ONT power of 300W across all ports.

## Mounting Choices

Tellabs 180CHP ONT is designed and tested for a wide variety of mounting scenarios. The ONT can be integrated inside office furniture, secured to a wall or underneath a desk or just be free-standing on a desktop.

# Specifications

## Physical

- Weight: 1.76 lbs / .8kg
- Depth: 5.9 in / 150 mm
- Width: 8.1 in / 205 mm
- Height: 1.4 in / 35 mm

## Interfaces

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

## Power

- Input at ONT (volts): 50-57Vdc
- Consumption Idle (watts): 10 W
- Consumption w/o PoE Max (watts): 16W
- Consumption w/PoE Max: 316W
- Dying Gasp support
- Phoenix and Molex connectors for power
- Local Power Supply Unit: 81.11P-PWIL320W, 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

## 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 SR31.4 and higher

## Installations

•OLTs supported: OLT6, OLT1, OLT2, OLT-mini, OLT1150, OLT1150E, OLT1134AC, OLT1131
•Mounting options: zone, wall, desktop, in-wall, enclosure

## Ordering Information

•ONT180CHP: 81.11G-ONT180CHP-R6

- Local Power Supply Unit:
  - 300 max POE: 81.11P-PWIL320W
  - 140W max POE: 81.11P-PWIL150W
  - 70W max POE: 81.11P-PWIL81WM

## General

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