



**SKU:** 81.11G-ONT140WN-R6

**Category:** Optical Network Terminals

# 140W Optical Network Terminal (ONT140W)

The Tellabs 140W Optical Network Terminal (ONT) offers 4-port Gigabit Ethernet connectivity for the new enterprise LAN. The ONT can be integrated inside office furniture or mounted securely inside a wall. Its paintable and changeable faceplate sets a high standard for matching a wide range of interior office decors. All modern enterprise services and applications can be delivered, including voice, video, high-speed data, wireless, security, access controls, environmental and building automation in a small in-wall form factor. Like all Tellabs Optical LAN Solution ONTs, the Tellabs 140W ONT provides simple, smart and scalable Gigabit-speed services in all enterprise LAN installations, including government, financial, education, healthcare and hospitality.

## Features

- Uses Tellabs industry-leading software-defined global profiles, traffic management, security, provisioning and traffic management mechanisms
- Building architects, engineers and consultants will enjoy the 140W ONT's paintable and changeable faceplate for matching a range of interior office decors
- Built-in audible location indicator for easy installation and labeling identification
- Enterprise grade G-PON ITU-T G.984 implementation
- Both IEEE 802.3af Power over Ethernet (PoE) and high-power PoE+ IEEE 802.3at
- Modular design with separate back box (with remote DC power termination and fiber cable slack storage), ONT electronics (with fiber termination) and a paintable/changeable faceplate
- Advanced IP and Ethernet Functions
- Supports IP-based voice, all forms of enterprise IP-based data traffic and all forms of enterprise IP-based video traffic
- Supports Dante and CobraNet digital audio systems over IP

## Highlights

### Advanced IP and Ethernet

Uses industry-leading software-defined traffic management, security, provisioning and quality of service mechanisms.

### Voice

The Tellabs 140W ONT supports enterprise VoIP connectivity with the latest unified communications systems such as Avaya and Cisco Unified Communications Call Manager can be delivered over fiber.

### Video

Supports all enterprise IP-based video traffic (e.g., entertainment, surveillance, conferencing)

### Powering

Remote powering is supported using a centrally located bulk power plant, emergency power and bulk battery back-up over composite single-mode fiber (greenfield), which provides two copper wires or repurposes existing CATx cabling (brownfield).

### Power over Ethernet (PoE)

Both IEEE 802.3af PoE and high-power PoE+ IEEE 802.3at, including Class-4 negotiations can be selected on per port basis. The maximum PoE power is 60 watts, spread across all four Ethernet ports.

### Mounting

The Tellabs 140W ONT is modular in design so that its ONT back box with power connectors and fiber cable slack storage can be installed separately. The ONT back box, with remote DC power termination, can be installed into a single or dual-gang form factor. This modular design allows for separate installation of DC power and fiber cable during the rough construction phase, while ONT electronics, fiber connectivity and the ONT faceplate can be installed during the finish construction phase. Another benefit of the ONT back box (with DC power termination and fiber cable slack storage) is that it can be installed in preparation for future growth considerations (cover with standard blank faceplate) without incurring the expense of purchasing ONT electronics and an ONT faceplate.

## Powering

Remote powering is supported using a centrally located bulk power plant, emergency power and bulk battery back-up over composite single-mode fiber (greenfield), which provides two copper wires or repurposes existing CATx cabling (brownfield).

## Specifications

### Physical

- Height: base 2.56" - faceplate 4.76"
- Width: base 1.85" - faceplate 2.79"
- Depth: base 1.28" - faceplate 0.87"
- Weight: base 1.0 lb - faceplate 0.1 lb

### Interfaces

- Four (4) RJ-45 / Gigabit Ethernet w/PoE
- One (1) SC-APC / G-PON (G.984) uplink

### Power

- Max Draw at ONT (Amps): 1.3A
- Consumption w/PoE Max (Watts): 72W
- Consumption w/o PoE Max (Watts): 8W
- Consumption Idle (Watts): 5W
- Input at ONT (Volts): 50-57Vdc

### Remote Power Options

- ONT Power Connector: Phoenix

### Power over Ethernet (PoE)

- Max Power Delivered (Watts): 60W
- Power over Ethernet, both PoE and PoE+ enabled on all four (4) ports

- Both IEEE 802.3af PoE and high-power PoE+ IEEE 802.3at, including Class-4 negotiations

## Alarm / Monitor / Test

- Dying Gasp
- OMCI

## Environmentals

- Relative humidity: 5% to 85%, noncondensing
- Temperature: 0C / +32F to +46C / +115F

## Compliance

- UL
- FCC
- ETL
- CE

## IP/Ethernet Network

- Total MACs 1,024
- VLANs per Port 25
- VLAN Groups 32
- Total VLANs 32
- Change of Authorization (Cisco ISE and ForeScout)
- Dynamic ARP Inspection (DAI)
- MAC Authentication Bypass (MAB)
- Private VLAN support
- Private VLAN support
- Network Access Control (NAC)
- Link Layer Data Protocol (LLDP) for autoprovisioning, inventory and PoE power management
- IEEE 802.1x Port-Based Authentication
- Power over Ethernet, both PoE and PoE+ enabled on all four (4) ports
- Both IEEE 802.3af PoE and high-power PoE+ IEEE 802.3at, including Class-4 negotiations
- Dante audio over IP
- Upstream ACL rate limiting
- L2-L4 Access Control Lists (ACLs)
- IPv6 capable for enterprise services
- MAC address limiting to prevent flooding attacks and number of devices attached to a port
- QoS and security policies based on VLAN-ID, 802.1p, DSCP
- VLAN translation and trunking
- VLAN tagging/detagging, marking/ remarking per Ethernet port
- Virtual switch based on 802.1Q VLAN

- Autosensing MDI/MDIX or manual configuration

## Passive Optical Network

- Class B and FDA 21 CFR 1040.10 and 1040.11, Class I
- Laser compliant to FCC 47 CFR Part 17
- 0.5~+5 dBm launch power, APD receiver and DFB transmitter
- ITU-T G.984.2 Amd1 Class B+
- 2.488 Gbps downstream receiver
- 1.244 Gbps burst mode upstream
- Wavelengths Downstream 1490 nm, and Upstream 1310 nm
- Support for multicast GEM port
- IP DSCP to 802.1p mapping
- Forward Error Correction (FEC)
- AES-128 decryption with churning keys
- Activation with automatically discovered Serial Number (SN) and password
- Flexible mapping of GEM ports and T-CONT with priority queue-based scheduling
- Compliant to ITU-T G.984 standards
- Remote image download over OMCI as well as activation and rebooting
- Alarming, events & performance monitoring
- OMCI complete service provisioning, such as Ethernet and VoIP
- Management Information Base (MIB) manipulation over OMCI by Create, Delete, Set, Get & Get Next commands
- OMCI ITU-T G.988 standard

## LED Indicators

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

## Management

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

## Software Support

- Minimum base software SR28 and higher
- Holds two versions of software with image integrity checking and automatic rollback
- Tellabs Panorama PON Manager

## Installation

- Mounting options in-wall and enclosure (sold separately)
- OLTs supported are OLT1150, OLT1150E, OLT1134AC, OLT1131, OLT6, OLT1, OLT-mini

## Ordering Information

- Tellabs 140W ONT electronics with wall faceplate: 81.11G-ONT140WN-R6
- DC power termination with back box: 81.11K-ONT140WP-R6 (10-pack)
- Colored faceplates can be ordered in bulk. Please contact for Tellabs sales representative for more ordering details.

## General

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