



**SKU:** 81.11G-ONT140CL-R6 **Category:** Optical Network Terminals

# 140CL Optical Network Terminal (ONT140CL)

The Tellabs 140CL Optical Network Terminals (ONTs) provide high-density Gigabit Ethernet connectivity that is a scalable and smart choice for the new enterprise LAN. This cost optimized ONT supports the modern office and extended campus environments, and can be integrated inside office furniture, secured to a wall, mounted underneath a desk or just be free-standing on a desktop. All enterprise services and applications can be delivered, including voice, video, high-speed data, wireless, security, access controls and building automation.

## **Features**

- •Enterprise grade G-PON ITU-T G.984 implementation
- •Uses Tellabs' industry-leading software-defined global profiles, traffic management, security, provisioning and traffic management mechanisms
- •Advanced IP and Ethernet Functions
- •Both IEEE 802.3af Power over Ethernet (PoE) and high-power PoE+ IEEE 802.3at
- •Flexible mounting above or below the desk, within the raceways of modular cubicle furniture, lockable enclosures, zone boxes in ceilings or raised floors
- •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

#### Voice

The Tellabs 140CL 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)

**Advanced IP and Ethernet** 

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

#### **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

Tellabs 140CL ONT mounting can be located above the desk or below the desk, within the raceways of modular cubicle work environments or ONTs

can be wall mounted. Where security is a priority, lockable enclosures can be used for any of the above-listed locations. They can also be mounted in zone boxes and in raised floors.

#### Powering

The Tellabs ONT140CL is designed with local power and remote powering options. Remote powering is supported using a centrally located bulk power plant, emergency power and bulk battery back-up over composite single mode fiber (greenfield).

# **Specifications**

#### **Physical**

- •Height: 1.6 in / 41 mm
- •Width: 5.5 in / 139 mm
- •Depth: 4.1 in / 104 mm
- •Weight: 0.2 lb/.09 kg

#### 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

#### **Local Power Options**

- •ONT Power Connector: B-Type
- •PSU Consumption: 100-240VAC @ 0.8A
- •PSU Part Number: 81.11P-PWIL81WM
- •Power Supply Unit (PSU): not included

#### **Power over Ethernet (PoE)**

•Max Power Delivered (Watts): 60W

•PoE Standards: IEEE 802.3at and IEEE 802.3af

#### Alarm / Monitor / Test

•Dying Gasp •OMCI

## Environmentals

- •Relative humidity: 5% to 85%, noncondensing
- •Temperature: 0C / +32F to +40C / +104F

#### Compliance

- •FCC
- •ETL
- •CE
- •RCM
- •UL
- •RoHS 6/6

#### **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
- •IGMP v2/v3 snooping
- •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
- •Wavelength 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 via OMCI
- •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 SR31.3 and higher
- •Holds two versions of software with image integrity checking and automatic rollback
- •Tellabs Panorama PON Manager

#### Installation

- •OLTs supported are OLT1150, OLT1150E, OLT1134AC, OLT1131, OLT6, OLT1, OLT-mini
- •Mounting options in zone, wall, raised floor, below desk and desk top

#### **Ordering Information**

- •Tellabs 140CL ONT: 81.11G-ONT140CL-R6
- •PSU Part Number: 81.11P-PWIL81WM
- •North American Power cable: 81.11W-C5TYPB-R6

#### General

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