



131 Wall Optical Network Terminal (ONT131W)

The Tellabs 131 Wall Optical Network Terminal (ONT131W) offers 3-ports of Ethernet and one (1) analog voice POTS for true enterprise applications inside buildings and outside across a far reaching campus. It offers flexible choices for indoor and outdoor mounting, plus in-wall and above-ceiling connectivity for the modern enterprise LAN.

Features

- •Three (3) 10/100/1000 RJ-45 Ethernet support and one (1) RJ-11 analog voice POTS
- •Meets industrial temperature ratings for ubiquitous indoor and outdoor connectivity
- •In-wall mounting into standard dual gang electrical box for clean aesthetically pleasing appearance
- •Enterprise grade G-PON ITU-T G.984 implementation
- •3rd Ethernet port and power connection from the backside of ONT for in-wall and aboveceiling connectivity needs
- •Plenum rated for mounting in air handling spaces
- •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

Highlights

Powering Options

Remote powering can be accomplished with 48V feed that can be connected at the rear of the ONT via a 2-wire phoenix style connector.

Mounting Choices

The Tellabs 131W ONT can be desktop or wall mount. In-wall mounting can be provided using standard dual or single gang electrical box. This ONT is also plenum rated for mounting in air handling spaces. It also supports industrial temperature ratings allowing both indoor and outdoor mounting locations. There are four holes in the ONT that extend through the faceplate to the back of the ONT and are used to secure the ONT into a standard dual or single gang electrical box.

Power over Ethernet (PoE)

With PoE functionality, the Tellabs 131W ONT connects to any Powered Device (PD) such as IP-Phones, IP-Camera, and other equipment that can be powered from the Ethernet port. 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 30 watts, spread across two Ethernet ports.

Centralized Management

All features and functionality can be defined in software and dynamically allocated, based on realtime 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 131W ONT 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.

Video

Packet based interactive IPTV services including multicast video and video-on-demand is supported on the Tellabs 131W ONT. This is inclusive of IGMP v2 plus v3 proxy, and MAC level ITU 802.1p QoS standards for streaming IP video and IPTV content delivery.

Voice

The Tellabs 131W ONT supports Plain Old Telephone Services (POTS) analog voice over one RJ-11

connectors. This means that VoIP Softswitch or CLASS 5 based high quality voice service through one POTS line or VoIP access through one of three Ethernet interfaces can be utilized. Proven interoperability with major soft switch manufacturers. Interoperability certification has been completed with Metaswitch and BroadSoft.

Advanced IP and Ethernet

Tellabs 131W ONT offers industry-leading software-defined traffic management, security, provisioning and quality of service mechanisms. True enterprise advanced IP and Ethernet protocols are supported for ultimate LAN security, scalability and operational efficiencies.

Specifications

Physical

- •Height: 5.45 in / 139 mm
- •Width 5.45 in / 139 mm
- •Depth: 1 in / 25.4 mm
- •Weight: 1.5 lb / .7 kg

Interfaces

- •Two (2) RJ-45 / Gigabit Ethernet w/PoE
- •One (1) RJ-45 / Gigabit Ethernet
- •One (1) RJ-11 connector
- •One (1) SC-APC / G-PON (G.984) uplink

Power

- •Input at ONT (volts): 50-57Vdc
- •Consumption Idle (watts): 10 W
- •Max PoE Power via remote power: 30W
- •Dying Gasp support

Remote Power Options

•ONT Power Connector: Phoenix

Power over Ethernet (PoE)

- •Max Power Delivered (Watts): 30W
- •Power over Ethernet, both PoE and PoE+ enabled on two (2) ports
- •Both IEEE 802.3af PoE and high-power PoE+ IEEE 802.3at, including Class-4 negotiations

Alarm / Monitor / Test

•OMCI

•Dying Gasp

Environmentals

- •Temperature: -40°C/-40°F to +60°C/140°F ambient
- •Humidity: 5% to 90% non-condensing

Voice

- •RJ-11 connector
- •5 REN per line, Loop start, Balanced and unbalanced ringing
- •Country specific coefficients and tones
- •SIP (RFC 3261)
- •DTMF dialing and encoding by RELAY or IN-BAND method
- •CLASS service support (Caller ID, Call Waiting, Call Forwarding, Call Transfer etc.), G.711 (u & a law), G.726-32, G.722, G.729
- Echo Cancellation
- •T.38 and IN-BAND Fax
- •Voice Activity Detection and Comfort Noise Generation
- •DHCP Client for voice IP assignment

Compliance

- •Safety: UL/CSA 60950, IEC 60950, ETSI
- •FDA FCC 47 CFR Part 15, Class B and FDR 21 CFR 1040.10 and 1040.11 Class 1
- •EMC: FCC PART 15, SUBPART B, CLASS B
- •EN 55022, EN 55024, EN 300 386, CLASS B
- •UL 2043 for Plenum Installation
- •CE: Compliant
- •RoHS6: Compliant
- •WEEE: Compliant

IP/Ethernet Network

- •Three (3) 10/100/1000Base-T Gigabit Ethernet RJ-45 connectors
- •RJ-45 IEEE 802.1 10/100/1000 Base-T interfaces
- •MDI/MDIX auto-sensing and auto-negotiation
- •802.1d Ethernet bridging and switching
- •802.1p marking/remarking, DSCP mapping
- •802.1Q including VLAN translation, filtering, tagging, stacking (QinQ)
- •Up to 256 multicast groups
- •IGMP v2/v3 Snooping with immediate leave
- •Downstream Flow and port-based Rate Limiting
- •Customer configurable bandwidth and Class of service

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- •IGMP v2 and v3 proxy
- •IEEE 802.1d transparent bridge (RFC-2684)

Passive Optical Network

- •2.5 Gbps downstream and 1.244 Gbps upstream
- •Optical wavelengths: 1490 +/-10nm Rx, 1310 +/-20nm Tx
- •Launch power: 0.5 to +5 dBm
- •Receiver Sensitivity: -27 dBm
- •Input power overload: -8 dBm
- •Received optical power monitoring
- •ITU-T G.984.4 / G.988 management
- •Serial number discovery
- •ITU-T G.984 / G.988 compliance
- •DBA support via mode-0 DBRu (piggy-back) reporting
- •Downstream Advanced Encryption Standard (AES) support
- •Forward Error Correction (FEC)
- •Upstream Traffic Management using Priority-based or Rate-controlled scheduling
- •Support for up to 8 T-CONTS with multiple priority queues per T-CONT
- •Multiple GEM ports with flexible mapping between TCONTs and Priority queues
- •pBit based GEM port and upstream Priority queue selection
- •IPTV traffic filtering (Multicast GEM port)
- •Operations, Administration and Maintenance (OAM) remote firmware upgrade and automatic rollback

LED Indicators

- Power
- Battery
- •Fail
- •LAN Data (traffic and alarm)
- Management
- •POTS

Management

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

Software Support

- •Minimum base software SR31.x 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 131W ONT: 81.11G-ONT131W

General

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