

Indoor Single Family/Small Business GPON ONT for Data Services

- ✓ *Standard ITU G.984 GPON*
- ✓ *Triple-Play QoS*
- ✓ *Multicast video*
- ✓ *Small form-factor*

Zhone's indoor residential GPON ONTs are designed to deliver a full range of advanced IP voice, data and video services over an all-optical broadband access network, and provide a lower cost alternative to outdoor ONT solutions. The Model 2301 GPON ONT provides many features in the smallest possible CPE package, including QoS and multicast video support.



The 2301 ONT features a 10/100/1000Mbps auto-sensing LAN Port in a stylish yet compact enclosure for indoor use. The 2301 ONT may be wall mounted inside the home or placed free-standing on a desktop, and can be equipped with a battery-backup system if necessary.

The 2301 ONT is ideal for FTTH or small business deployments in bridging-only applications where high-speed data must be transported reliably. The 2301 ONT also operates well in conjunction with separate RG devices such as routers and WiFi access points to provide flexible triple-play configurations.

This ONT model includes an On/Off switch conveniently located near the DC power connector. Dying-Gasp support alerts the network operator of removal of power, helpful for problem identification in areas served by the public.

Compliant with standard OMCI definitions, the 2301 ONT is manageable at remote sites and supports the full range FCAPS functions including supervision, monitoring and maintenance.

Zhone provides the complete PON solution: ONTs, OLTs, optical splitters, BBUs, EDFAs, RF Transmitters, cabinet solutions and management systems are available from Zhone allowing our customers to buy a complete and fully tested solution from one trusted source.

Technical Specifications

Dimensions

- Complete Indoor Enclosure
- 130mm W x 90mm D x 35mm H
- 5.2" W x 3.5" D x 1.4" H

Weight

- Less than 0.5 kg (without AC Power Supply)

Power

- Input: 110/240V AC Power Supply (12 VDC output)
- Power Consumption: 3 to 5 W

Interfaces

- GPON
 - SC/APC Fiber Connector
 - Full ITU-T G.984 compliance
 - GPON ONU Class B+ optics
- GPON Tx
 - Upstream data rate 1.244Gbps
 - Burst-mode upstream transmitter (1310nm)
 - Launch power is +0.5 to +5.0 dBm
- GPON Rx
 - Downstream data rate 2.488Gbps
 - Downstream receiver (1490nm)
 - RX sensitivity -28dBm
 - RX power overload level -8dBm
- Ethernet
 - 1x 10/100/1000 Base-T Ethernet
 - RJ45 jack
 - Meets IEEE 802.3 specifications
 - Auto-MDI/MDIX
 - Auto-speed

Standards Support

- ITU-T G.984 compliant
- IEEE 802.3 Ethernet
- IEEE 802.1q/p VLANs

Protocol Support

- GPON
 - Fully ITU-T G.984 compliant framing
 - 8 T-CONTs per device
 - 64 GEM Ports per device
 - Flexible mapping between GEM Ports and T-CONTs
 - Activation with automatically discovered SN and password in conformance with ITU-T G.984.3
 - AES-128 Decryption with key generation and switching
 - FEC (Forward Error Correction) upstream and downstream
 - 802.1p mapper service profile on U/S
 - Mapping of GEM Ports into a T-CONT with priority queues based scheduling
 - Support for Multicast GEM Port
- Ethernet / IP
 - Bridging and switching (802.1d / 802.1q)
 - Four traffic classes with 802.1p
 - 802.3n flow control
 - Up to 128 MAC address entries
 - VLAN tagging / untagging
 - VLAN stacking (Q-in-Q)
 - MAC limiting
 - 2,000 bytes max ethernet frame size
- IPTV
 - IGMP multicast
 - IGMP snooping

Management

- OMCI (complies with G.984.4)

Regulatory Compliance

- CE

Operating Requirements

- Temperature: -5C to +45C
- Humidity: 5% - 95%, non condensing

Ordering Information

ZNID-GPON-2301-xx

Indoor GPON ONT, 1xGE, xx = EU, UK power supply; xx = 00 for no power supply