

Indoor Single Family Unit GPON ONT

- ✓ *Standard ITU G.984 GPON*
- ✓ *Triple-Play QoS*
- ✓ *VoIP with CLASS 5 Features*
- ✓ *RF Video*
- ✓ *Multicast video*
- ✓ *Built-in Layer-2 switch*



Zhone's indoor residential GPON ONT are standards based CPE designed for advanced triple-play deployments. The indoor models in Zhone's zNID product line of ONT's provide a lower cost alternative to outdoor ONT solutions. The small package contains many features including QoS, VoIP, RF video and multicast video support.

The zNID ONT is only one component in the PON network. Zhone provides the entire FTTx solution to our customers including the OLT, splitters, cabinets, and the ONT.

2511 indoor ONT is designed for high performance applications. It features 4 10/100 Mbps LAN Ports, 2 POTS Voice FXS ports and an RF video coax port in a compact enclosure for indoor use. 2511 may be installed as a desktop or, wall mounted and is powered via an AC Adaptor.

2511 ONT is ideal for triple-play service deployments in Fiber-to-the-Home/Premise application. Industry standard SIP and H.248 voice signaling provides reliable voice services while Zhone's experience with packet voice ensures interoperability and support with a large number of soft switches. The four Ethernet ports can be separated into different services allowing the configuration of dedicated ports for IP video and data.

Compliant with standard OMCI definition, 2511 is manageable at remote side and supports the full range FCAPS functions including supervision, monitoring and maintenance.

Zhone provides THE complete PON solution: ONT, OLT, splitter, EDFA, RF Transmitters, and cabinet solutions are available from Zhone because our customers want to buy a complete and fully tested solution from one trusted source.

Technical Specifications

Dimensions

- 66mm x 267mm x 200mm

Power

- Input: 110/240V AC Adaptor (12 VDC)
- Power Consumption: 8-12W
- Dying Gasp Support

Interfaces

- GPON: SC/APC Connector
- 1.244Gbps Burst Mode Upstream Transmitter (1310nm)
- 2.488Gbps Downstream Receiver (1490nm)
- Data: 4x 10/100 Base-T Ethernet
- Voice: 2x RJ11
- Video: 1x F-type connector
 - RF Output Level 18 dBmV/ch
 - Total RF output power 36 dBmV
 - RF Passband: 46 MHz - 870 MHz

Standards Support

- ITU-T G.984 compliant

Voice Support

- 5 REN per line, balanced Ring at 55V RMS, DTMF dialing
- Multiple voice codec - G.711 (u/a-law), G.726, G.729 (A and B), G.723.1
- T.30 and T.38 Fax
- Echo Cancelling, VAD, CNG
- Various CLASS services - Caller ID, Call Waiting, Call Forwarding, Call Transfer, etc.
- SIP (RFC3261), MEGACO v2 (H.248)
- Common architecture, drop-in replacement

Protocol Support

- GPON
 - Fully ITU-T G.984 compliant framing
 - Multiple T-CONTs per device
 - Multiple GEM Ports per device
 - Support Single T-CONT mode and Multiple T-CONTs mode
 - Flexible mapping between GEM Ports and T-CONT
 - Activation with automatic discovered SN and password in conformance with ITU-T G.984.3
 - AES-128 Decryption with key generation and switching
 - FEC (Forward Error Correction)
 - DBA reporting in status indications in the PLOu, and by piggyback reports in the DBRu (mode 0)
 - 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 512 MAC address entries
 - VLAN tagging / untagging
 - VLAN stacking (Q-in-Q)
 - MAC limiting
 - 802.1x Ethernet Authentication
- IPTV
 - IGMP multicast
 - IGMP snooping

Management

- OMCI complies with G.984.4

Bandwidth/Distance

- Compliant with ITU-T G.984.2 Amd1, Class B+
 - APD receiver and DFB transmitter
 - 0.5~+5dBm launch power, -27 dBm sensitivity, and -8dBm overload
- CATV Receiver
 - min -8 dBm
 - max +2 dBm

Regulatory Compliance

- CE (ETSI)
- FCC Part 15 Subpart B
- ETL

Operating Requirements

- Operating Temperature: -5C to 45C
- Operating Humidity: 5% - 90% non condensing
- Storage Temperature: -20C to 60C
- Storage Humidity: 5% - 95% non condensing

Ordering Information

ZNID-GPON-2511-xx

Indoor GPON ONT, 4xFE, 2xPOTS, RF xx = NA, UK, EU power supply



Z H O N E

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