

Standards-based Outdoor GPON ONT for single family unit deployments.

- ✓ *Standard ITU G.984 GPON*
- ✓ *Outdoor deployment*
- ✓ *Triple-Play QoS*
- ✓ *VoIP with CLASS Features™*
- ✓ *Multicast video*
- ✓ *RF video with RF return*
- ✓ *Battery backup support*



Zhone's outdoor residential GPON ONT are standards-based NID's designed for advanced triple-play deployments. The weather proof enclosure can be installed to terminate and protect fiber connections while the electronics can be easily installed at a later date. The electronics could be installed inside the home with or without the enclosure.

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.

The 4100 series of Zhone GPON ONT is a standards-based GPON ONT designed for outdoor deployments.

The 4100 is designed for outdoor single family deployments providing four derived POTS lines and two Gigabit Ethernet ports. The 4111 model also supports RF overlay for customers who want to take advantage of their existing coaxial plants. The 4114 model supports RF overlay with RF return to interoperate with interactive cable functions.

Industry standard SIP and H.248 supplies reliable voice services while Zhone's experience with packet voice means the support of a large number of soft switches. The 4100 models also support SIP-PLAR and can be used with Zhone's voice gateway solution when connecting to existing CLASS-5 switches. The Gigabit Ethernet ports bring data and IP video services into the home. RF video overlay on the 4111 and 4114 models use the 1550 nm wavelength to transport analog and digital RF television channels to the subscriber.

Powering the 4100 models is supported over a 7-pin phoenix-type connector for battery backup support.

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

- 286 mm (11.25") W x 330 mm (13") H x 110 mm (4.3") D

Power

- Input: 12 VDC
- Power Consumption: max 16 Watts
- Uses standard 7 pin UPS cable for power and alarms

Interfaces

- GPON: SC/APC
- Data:
 - 4110 - 2x 10/100/1000 Base-T Ethernet
 - 4111/4114 - 1x 10/100/1000 Base-T Ethernet
- Voice:
 - 4110 - 4x RJ11 or IDC
 - 4111/4114 - 2x RJ11 or IDC
- Video:
 - 4111/4114 - Type F coax connector

Standards Support

- ITU-T G.984 compliant

Voice Support

- 5 REN
- Loop start
- GR-909 testing
- SIP, SIP-PLAR, H.248
- G.711, G.726
- Echo Cancellation, Voice Activity Detection, Silence Suppression, Comfort Noise Generation
- Caller ID
- CLASS features
- DTMF in RTP (RFC 2833)
- T.38 Fax
- Modem, fax tone detection
- Fixed or adaptive jitter buffer.

Protocol Support

- GPON
 - Full ITU G.984 compliance
 - FEC, AES, DBA
 - Up to six traffic containers
- 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

- Supports 2.5 Gbps downstream, 1.2 Gbps upstream
- Class B+ optics
- 20 km reach

Regulatory Compliance

- EN 55022, EN 55024, EN 50160:200
- IEC 60950-1:2001, IEC/TR 60083 ED4 (2004-05)
- CE
- UL

Ordering Information

ZNID-GPON-4110-EL	Outdoor GPON ONT, 4xPOTS, 2xGE, electronics only
ZNID-GPON-4111-EL	Outdoor GPON ONT, 1xPOTS, 1xGE, RF, electronics only
ZNID-GPON-4114-EL	Outdoor GPON ONT, 2xPOTS, 1xGE, RF Return, electronics only
ZNID-GPON-4100-ENCL	Outdoor enclosure for 4100 model ONT's. Use when buying electronics separately.
ZNID-BATT-IN-NA	Indoor UPS with 7.2ah battery, North American AC plug
ZNID-BATT-IN-EURO	Indoor UPS with 7.2ah battery, European AC plug
ZNID-BATT-OUT-NA	Outdoor UPS with 7.2ah battery, North American AC plug
ZNID-BATT-CABLE-10METER	10 meter, 7-wire cable used with ZNID-BATT UPS

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