

# zNID - Zhone's Intelligent NID

ZNID-GPON-4240, 4241, 4242, 4243, 4244

# GPON ONT with integrated intelligent gateway functionality.

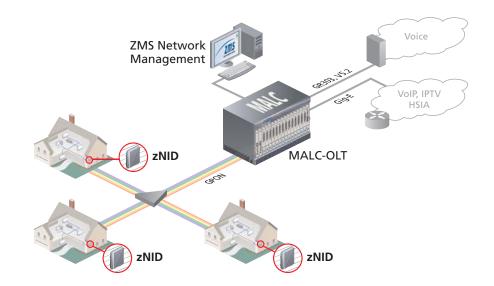
- Triple Play Services IP
   Video, VoIP, High Speed
   Internet Access
- No New Home Wiring -HPNA supported on Coax and/or Phonelines eliminates the need to run new wires.
- Two Step Easy Installation

   Install fiber enclosure
   without the need for
   electronics. Electronics can
   be installed after services
   are ordered.
- Remote Management -Web GUI, CLI, SNMP, and ZMS.



The zNID is an intelligent NID supporting GPON termination with full-featured gateway functionality providing an ideal solution for FTTH deployments.

Triple Play services - IPTV, POTS or VoIP, and High Speed Internet Access (HSIA) - over existing coax makes service offerings and installations flexible and easy.



## No New Home Wiring

The zNID product line supports HPNA over coax giving greater flexibility to service providers who want to take advantage of the network already installed in the user's home. The zNID is able to guarantee the best throughput possible over the coax network giving added flexibility when offering triple play services. HPNA over the existing coax eliminates the need to run new cables.

## **Gateway Features**

The zNID is a full-featured gateway supporting services such as DHCP server, ALG's, scheduling, comprehensive logging, and more. The zNID product line implements a very flexible QoS allowing the service provider to guarantee that services are being prioritized correctly and the end-user is getting the Quality of Experience that is expected.

## Enclosure

The enclosure can be installed in two stages for carriers wanting to terminate fiber before installing the active components. A small plastic enclosure can be installed first allowing the installer to terminate the fiber. Later, when the customer has ordered service, the active components are snapped into the fiber enclosure, allowing for a quick and easy installation.

### Management

The zNID has a very intuitive Web interface. The zNID is also managed by the Zhone Network Management System (ZMS), using SNMP. Software upgrades, or configuration backups are handled automatically by the ZMS.

# DATASHEET

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## **Technical Specifications**

#### Dimensions

- Complete Enclosure
- 12.7 in H x 9.9 in W x 3.8 in D
- 32.2 cm H x 25.1 cm W x 9.7 cm D

#### Weight

3.5 lbs. (1.6 kg)

#### Power

- 12 Vdc
- Max Power: 15W
- Power options include:
  - Separate Outdoor battery backup
  - Separate Indoor battery backup
  - Standard 7-pin power and alarm connector
  - Optional 2-pin power and alarm module

#### Interfaces

- Uplink options:
- SC/APC connector for GPON
- OptiTap support
- Common interfaces for GPON:
  - 2x FXS
  - 2x RJ45 10/100/1000Base-T
  - 1x Coax type F connector for RF video or HPNA
  - USB Craft Port
  - HPNA over Coax

#### **Standards Support**

- IEEE 802.3 Ethernet
- IEEE 802.1Q/p VLANs
- IEEE 802.3u Fast Ethernet
- IEEE 802.31b 1000 Base-T
- ITU-T G.984(GPON)

#### Voice Support

- SIP
- SIP-PLAR
- MGCP
- Codec Support: G.711, G.726, G.729
- VAD, Silence suppression, comfort noise generation
- Major CLASS features supported
- 5 REN per port

#### **Protocol Support**

- DHCP Server, DHCP Client
- IP Routing and Bridging
- NAT
- Virtual LAN bridging (VLAN)
- Firewall and Security
- QoS
- 802.1P/Q prioritization - Diffserv (RFC2474, RFC2475) marking and
- queuing
- Traffic shaping bandwidth management and rate limiting

#### Management

- Web GUI
- ZMS (Zhone Management System) CPE Manager
- CLI
- SNMP
- Bandwidth/Distance
- GPON interface with Class B+ optics (20km)
- 1310nm
- Launch Power:
- -- Minimum 0.5 dBm
- -- Average 2 dBm
- -- Maximum +5 dBm
- 1490nm
- Sensitivity -28 dBm

#### **Regulatory Compliance**

- EMC: FCC Part 15 Class A, ICES-003 Class A,EN55022 Class A, EN55024
- Safety: UL60950-1, CSA C22.2 No. 60950-1, EN60950-1
- Network: FCC Part 68, IC CS-03

#### **Operating Requirements**

- Temperature: -40°C to +60°C
- MTBF: greater than 100,000 hours

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# **Ordering Information**

ZNID-GPON-4240	Outdoor ONT, 4x voice, 2x GE, with Fiber enclosure.
ZNID-GPON-4240-EL	Outdoor ONT, 4x voice, 2x GE. Electronics only. Fiber enclosure sold separately.
ZNID-GPON-4241	Outdoor ONT, 4x voice, 2x GE, RF Overlay, with Fiber enclosure.
ZNID-GPON-4241-EL	Outdoor ONT, 4x voice, 2x GE, RF Overlay. Electronics only. Fiber enclosure sold separately.
ZNID-GPON-4242	Outdoor ONT, 4x voice, 2x GE, HPNA-Coax, with Fiber enclosure.
ZNID-GPON-4242-EL	Outdoor ONT, 4x voice, 2x GE, HPNA-Coax. Electronics only. Fiber enclosure sold separately.
ZNID-GPON-4243	Outdoor ONT, 4x voice, 2x GE, HPNA-Coax, with Fiber enclosure.
ZNID-GPON-4243-EL	Outdoor ONT, 4x voice, 2x GE, HPNA-Coax, RF Overlay. Electronics only. Fiber enclosure sold separately.
ZNID-GPON-4244	Outdoor ONT, 4x voice, 2x GE, HPNA-Coax, HPNA-Phone, RF Overlay, with Fiber enclosure.
ZNID-GPON-4244-EL	Outdoor ONT, 4x voice, 2x GE, HPNA-Coax, HPNA-Phone, RF Overlay. Electronics only. Fiber enclosure sold separately.
ZNID-ENCL-424x	zNID-424x fiber termination enclosure. (GPON electronics sold separately.)
ZNID-ENCL-424x-OPTITAP	zNID-424x OPTITAP fiber termination enclosure. (GPON electronics sold separately.)
ZNID-ENCL-424x-STORAGE	zNID-424x Slack cable storage enclosure.
ZNID-BATT-IN-12V27W-xxxx-D	zNID indoor battery backup. xxxx = 003G, EU3G, NA3G, UK3G
ZNID-BATT-OUT-XX	zNID outdoor battery backup. XX = NA, EU, UK
ZNID-BATT-ALARM-VERT-MODULE	2-Wire BBU Alarm Module (compatible with CSN27U12V BBU)
ZNID-BATT-ALARM-VERT-MOD-20P	2-Wire BBU Alarm Module, pack of 20

