

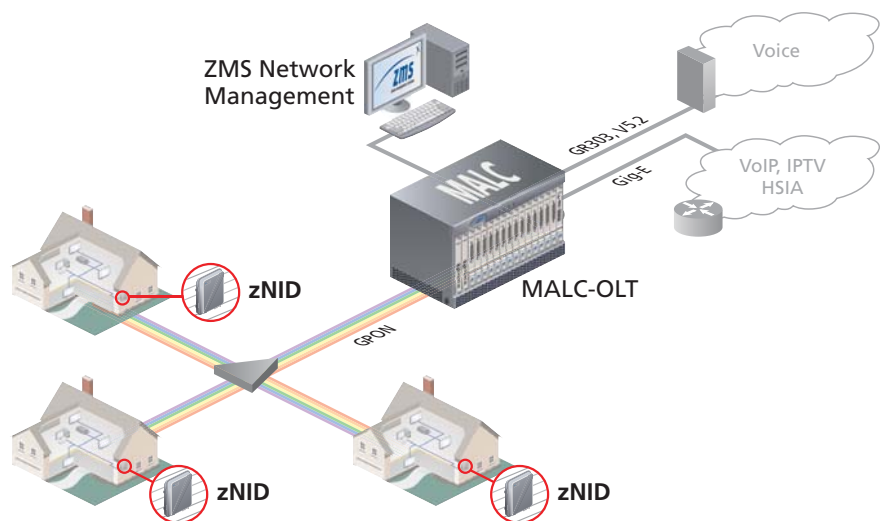
GPON ONT with integrated intelligent gateway functionality.

- ✓ *Triple Play Services - IP Video, VoIP, High Speed Internet Access*
- ✓ *No New Home Wiring - HPNA supported simultaneously on Coax and Phone Line 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, SNMP, and TR-069.*



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 and/or phone line make service offerings and installations flexible and easy.



No New Home Wiring - HomePNAv3.1

The zNID product line is the first gateway on the market to support both HPNA over coax and phone line using two HPNA chipsets 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 and the phone line network giving added flexibility when offering triple play services. HPNA over the existing coax and the existing phone line simultaneously virtually 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, VPN termination, 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. There is no need for the complex OMCI commands. 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.

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:
 - Outdoor battery backup
 - Indoor battery backup
- The zNID supports the standard 7-pin power connector.
- The zNID can be powered over an unused phone line pair, from the home, eliminating the need to drill holes and pull thick power cables through exterior walls.

Interfaces

- Uplink options:
 - SC/APC connector for GPON
 - OptiTap support
- Common interfaces for GPON:
 - 2x FXS (SIP or SIP-PLAR) - HPNA over phone line shares voice line 1
 - 3x RJ45 10/100Base-T
 - 1x Coax type F connector for HPNA
- HPNA:
 - First phone line (4202)
 - Coax (4202, 4203)

Standards Support

- IEEE 802.3 Ethernet
- IEEE 802.1Q/p VLANs
- Network Applications
- 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

Voice Support

- SIP
- SIP PLAR
- Codec Support: G.711, G.723, G.726, G.729
- VAD, Silence suppression, comfort noise generation
- Major CLASS features supported
- 5 REN per port

Protocol Support

- GPON uplink:
 - ITU-T G.984 (GPON)

Management

- Web GUI
- SNMP
- TR-069
- ZMS (Zhone Management System)

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, EN 60950-1
- Network: FCC Part 68, IC CS-03

Operating Requirements

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

Ordering Information

ZNID-GPON-4201	GPON ONT, Outdoor, 2x voice, 3x FE, with fiber termination enclosure.
ZNID-GPON-4202	GPON ONT, Outdoor, 2x voice, 3x FE, HPNA-Coax, HPNA-Phoneline, with fiber termination enclosure.
ZNID-GPON-4203	GPON ONT, Outdoor, 2x voice, 3x FE, HPNA-Coax, with fiber termination enclosure.
ZNID-GPON-4201-OPTITAP	GPON ONT, Outdoor, 2x voice, 3x FE, with OPTITAP fiber termination enclosure.
ZNID-GPON-4202-OPTITAP	GPON ONT, Outdoor, 2x voice, 3x FE, HPNA-Coax, HPNA-Phoneline, with OPTITAP fiber termination enclosure.
ZNID-GPON-4203-OPTITAP	GPON ONT, Outdoor, 2x voice, 3x FE, HPNA-Coax, with OPTITAP fiber termination enclosure.
ZNID-GPON-4201-EL	GPON ONT, Outdoor, 2x voice, 3 FE, Electronics only. (Fiber enclosure sold separately)
ZNID-GPON-4202-EL	GPON ONT, Outdoor, 2x voice, 3 FE, HPNA-Coax, HPNA-Phoneline, Electronics only. (Fiber enclosure sold separately)
ZNID-GPON-4203-EL	GPON ONT, Outdoor, 2x voice, 3 FE, HPNA-Coax, Electronics only. (Fiber enclosure sold separately)
ZNID-ENCL-420x	zNID-420x fiber termination enclosure. (GPON electronics sold separately.)
ZNID-ENCL-420x-OPTITAP	zNID-420x OPTITAP fiber termination enclosure. (GPON electronics sold separately.)
ZNID-ENCL-420x-STORAGE	zNID-420x Slack cable storage enclosure.
ZNID-BATT-IN-XX	zNID indoor battery backup. XX = NA, EURO, UK
ZNID-BATT-OUT-XX	zNID outdoor battery backup. XX = NA, EURO, UK
HPNA-COAX-ETH-XX	HPNA over coax with 2x RJ-45 Ethernet interfaces. XX = NA, EURO, UK
HPNA-PHONELINE-ETH-XX	HPNA over phoneline with 2x RJ-45 Ethernet interfaces. XX = NA, EURO, UK

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