

Outdoor Gigabit Active Ethernet ONT

- ✓ *Triple Play Services - IP Video, VoIP, High Speed Internet Access*
- ✓ *1 Gbps Bridging and Routing*
- ✓ *VoIP with CLASS Features*
- ✓ *Multicast Video*
- ✓ *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, ZMS CPE manager, CLI and SNMP.*



The zNID supports Gigabit Ethernet termination with full-featured gateway functionality providing an ideal solution for FTTH deployments.

The zNID-GE-422x is designed for outdoor single family deployments providing two voice lines, and two Gigabit Ethernet ports.

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

The zNID product line integrates two HPNA chipsets to simultaneously support both HPNA over coax and phone line, 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 with integrated DHCP server, ALG's, NAT Router, PPPoE Client, 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 weather proof 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 intuitive Web and command line interfaces. The zNID is also managed by the Zhone Network Management System (ZMS), using SNMP. Software upgrades and configuration backups can be handled automatically by the ZMS using the CPE Manager feature.

Technical Specifications

Dimensions

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

Interfaces

- 1 Active Ethernet Gigabit (SFP)
- 2x FXS
- 2x RJ45 10/100/1000Base-T
- HPNA:
 - First phone line
 - Coax
- USB craft port

Standards Support

- IEEE 802.3 Ethernet
- IEEE 802.1p/q VLANs
- IEEE 802.3u Fast Ethernet
- IEEE 802.3ab 1000Base-T

Voice Support

- SIP
- SIP-PLAR
- MGCP
- Codec Support: G.711, G.726, G.729a
- Major CLASS features supported
- Three way calling, distinctive ringing
- 5 REN per port

Protocol Support

- DHCP Server, DHCP Client
- IP Routing and Bridging
- NAT
- PPPoE Client
- 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
- IPTV
 - IGMP Multicast
 - IGMP snooping

Management

- Web GUI
- ZMS (Zhone Management System) CPE Manager
- CLI
- SNMP

Bandwidth/Distance

- 1 Gigabit (SFP)
- Up to 60 km (depending on SFP)

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

Operating Requirements

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

Ordering Information

ZNID-GE-4220	Outdoor ONT, 2x Voice, 2x GE, with Fiber enclosure.
ZNID-GE-4220-EL	Outdoor ONT, 2x Voice, 2x GE. Electronics only. SFP not included, and Fiber enclosure sold separately.
ZNID-GE-4222	Outdoor ONT, 2x Voice, 2x GE, HPNA-Coax, with Fiber enclosure.
ZNID-GE-4222-EL	Outdoor ONT, 2x Voice, 2x GE, HPNA-Coax. Electronics only. SFP not included, and Fiber enclosure sold separately.
ZNID-GE-4224	Outdoor ONT, 2x Voice, 2x GE, HPNA-Coax, HPNA-Phone, with Fiber enclosure.
ZNID-GE-4224-EL	Outdoor ONT, 2x Voice, 2x GE, HPNA-Coax, HPNA-Phone. Electronics only. SFP not included, and Fiber enclosure sold separately.
ZNID-ENCL-422x	zNID-422x fiber termination enclosure. (Electronics sold separately.)
ZNID-ENCL-422x-OPTITAP	zNID-422x OPTITAP fiber termination enclosure. (Electronics sold separately.)
ZNID-ENCL-422x-STORAGE	zNID-422x Slack cable storage enclosure.
SFP-GE-BX10-1310-SLC	SFP GE BX(1000 Mbps) TX 1310nm, RX 1550nm, up to 10km.
SFP-GE-BX20-1310-SLC	SFP GE BX(1000 Mbps) TX 1310nm, RX 1550nm, up to 20km.
SFP-GE-BEX-1310-SLC	SFP GE BEX(1000 Mbps) TX 1310nm, RX 1550nm, up to 40km.
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