ZHONE
Bandwidth Changes Everything™

zNID 2400A Series Indoor Active Ethernet ONT
ZNID-GE-2402A, ZNID-GE-2424A, ZNID-FE-2424A, ZNID-CU-2424A,
ZNID-GE-2426A, ZNID-FE-2426A, ZNID-CU-2426A

✓ *Flexible Uplink Options*

✓ *Triple-Play Services - VoIP, IP Video, HS Internet Access*

✓ *Multicast video*

✓ *VoIP with CLASS 5 Features*

✓ *Wirespeed Bridging and Routing*

✓ *802.11b/g/n WiFi*

✓ *Remote Management - Web GUI, ZMS CPE Manager, CLI, and SNMP*

Zhone's indoor residential 2400A Series Active Ethernet ONTs are designed for advanced triple-play deployments in Fiber-to-the-Home/Premise applications. The indoor models in Zhone's zNID product line of ONTs provide a lower cost alternative to outdoor ONT solutions. The small package contains many features including QoS, VoIP, and multicast video support. The series include four 10/100/1000Mbps LAN Ports, two POTS Voice FXS ports, one USB port, and optional WiFi (with internal antennas) in a compact enclosure for indoor use. Flexible uplink options include dedicated fiber links at 100Mbps or 1Gbps, or a dedicated auto-sensing copper link supporting FE and GE speeds on the same ONT model.

Supporting industry standard SIP and MGCP voice signaling provides reliable voice services. 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.

With wire-speed routing, a web UI for local management, and support for Zhone's CPE Management system, the Zhone Active Ethernet solution paired with the MXK OLT is an efficient way to extend bandwidth intensive services to the network edge using standard Ethernet frames.

The Active Ethernet 2400A Series ONTs can be either wall mounted inside the home or placed freestanding on a desktop, and can be equipped with a battery backup for lifeline services.

Technical Specifications

Dimensions

- Complete Enclosure
- 1.5 in. H x 10 in. W x 6 in. D
- 3.8 cm H x 25.4 cm W x 15.2 cm D

Weight

- 1.0 - 1.2LB (0.45 - 0.54 kg)

Power

- 12 VDC (DC Models)
- 100-240 VAC 50/60 Hz (AC Models)
- Max Power: 15W

Interfaces

- Active Ethernet Uplink (-GE models)
  - SC/PC connector
  - 1490nm Rx, 1310nm Tx
  - SFF (non-removable) optics work over a 20km distance
  - Uplink speed = 1000Mbps
- Active Ethernet Uplink (-FE Models)
  - SC/UPC connector
  - 1550nm Rx, 1310nm Tx
  - SFF (non-removable) optics work over a 20km distance
  - Uplink speed = 100Mbps
- Active Ethernet Uplink (-CU models)
  - RJ-45 jack
  - 100/1000 Base-T ports
  - Auto-MDI/MDIX and auto speed supported
- Ethernet (LAN-side)
  - RJ-45 jack
  - 4 10/100/1000 Base-T ports
  - Meets IEEE 802.3 specifications
  - Auto-MDI/MDIX and auto speed supported
- POTS
  - RJ-11 connector
  - 2 FXS ports
- WiFi
  - 802.11b/g/n
  - Dual internal antennas
- USB
  - USB 2.0 Type A connector

Wireless Support

- 2x2 MIMO
- SSID support: 4
- Max number of subscribers: 64
- Maximum Tx power: 300 mW (-NA model); 100 mW (-EU and -UK models)
- Antennas: dual internal, 5dBi
- WEP, WPA-PSK, WPA2-PSK (AES, TKIP)
- 802.1x
- 64 bit and 128 bit WEP support
- MAC address filtering

Standards Support

- ITU-T G.984 compliant
- IEEE 802.3 Ethernet
- IEEE 802.1q/p VLANs
- IEEE 802.3u Fast Ethernet
- IEEE 802.3ab 1000Base-T

Voice Support

- SIP (RFC 3261)
- SIP PLAR
- MGCP
- Codec: G.711 (u-law and A-law), G.729B, G726
- DTMF dialing
- 5 REN per line
- Echo cancellation
- Voice Activity Detection and Comfort Noise Insertion
- Caller ID, Call Waiting, Call Forwarding, Call Transfer, Three Way Calling, Distinctive Ringing
- G.711 fallback for FAX
- T.30 and T.38 FAX
- DHCP client or static IP configuration

Protocol Support

- QoS
  - Ethernet bridging/switching per IEEE 802.1p/802.1q
  - Traffic management (priority queuing and traffic shaping)
  - QoS with support for IEEE 802.1p + DSCP
- VLANs
  - Per port IEEE 802.1q VLAN ID processing
  - All VLAN IDs supported in Open Trunk Mode
  - Maximum of 12 VLANs per LAN port in Filtered Trunk Mode
  - VLAN tagging/untagging
  - VLAN Stacking (QinQ)
  - VLAN Switching
  - SSID to VLAN Mapping
- IPTV
  - IGMP v2/v3 Snooping
  - VLAN support
- Layer 2
  - IEEE 802.3n flow control
  - Automatic MAC learning and aging
  - Unlimited # of MAC addresses for OMCI-configured flows
  - Support for up to 4,096 MAC addresses for RG traffic flows
  - Broadcast storm control
- IP Routing and Firewall
  - PPPoE
  - NAT/NAPT
  - Port forwarding
  - DHCP Server
  - DNS Proxy

Management

- OMCI
- Web UI
- CLI
- SNMP

Regulatory Compliance

- CE
- UL
- FCC part B

Operating Requirements

- Temperature: 0°C - +40°C
- Humidity: 5 ~ 90% relative humidity, non-condensing

Ordering Information

ZNID-GE-2402A-xx	Indoor GE Active Ethernet ONT (Fiber), 2xGE; xx = NA, UK, EU, power supply options
ZNID-GE-2424A-xx	Indoor GE Active Ethernet ONT (Fiber), 2xPOTS, 4xGE; xx = NA, UK, EU power supply options
ZNID-FE-2424A-xx	Indoor FE Active Ethernet ONT (Fiber), 2xPOTS, 4xGE; xx = NA, UK, EU power supply options
ZNID-CU-2424A-xx	Indoor FE/GE Active Ethernet ONT (Copper), 2xPOTS, 4xGE; xx = NA, UK, EU power supply options
ZNID-GE-2426A-xx	Indoor GE Active Ethernet ONT (Fiber), 2xPOTS, 4xGE; WiFi; xx = NA, UK, EU power supply options
ZNID-FE-2426A-xx	Indoor FE Active Ethernet ONT (Fiber), 2xPOTS, 4xGE; WiFi; xx = NA, UK, EU power supply options
ZNID-CU-2426A-xx	Indoor FE/GE Active Ethernet ONT (Copper), 2xPOTS, 4xGE, WiFi; xx = NA, UK, EU power supply options