GPON ONT for Residential Deployment

- **Standard ITU G.984 GPON**
- **Indoor deployment**
- **Triple-Play QoS**
- **Multicast video**
- **VoIP with CLASS 5 Features**
- **802.11b/g/n WiFi**

Zhone’s indoor residential 2400A Series GPON 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 ONT’s 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.

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 GPON ONT solution paired with the MXK OLT is an efficient way to extend bandwidth intensive services to the network edge using standard Ethernet frames.

The GPON 2400A Series ONTs can be either wall mounted inside the home or placed freestanding on a desktop,
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: 16W

Wireless Support
- 2x2 MIMO
- SSD support: 4
- Max number of subscribers: 64
- Maximum Tx power: 300 mW (-NA model); 100 mW (-EU and -UK models)
- Antennas: dual internal or removable external, 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
- VLAN support
- Auto-MDI/MDIX and auto speed supported

Voice Support
- SIP (RFC 3261)
- SIP PLAR
- MGCP
- Codec: G.711 (u-law and A-law), G.729B, G.726
- 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
- GPON
  - Fully ITU-T G.984 compliant framing
  - 32 T-CONTs per device
  - 32 GEM Ports per device
  - Activation with automatic discovered SN and password in conformance with ITU-T G.984.3
  - AES-128 Decryption with key generation and switching
  - FEC (Forward Error Correction)
  - 802.1p mapper service profile on US
- 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
  - 802.1Q VLAN Mapping

Management
- OMCI
- Web UI
- CLI
- SNMP
- USP (Unified Service Provisioning)

Regulatory Compliance
- CE
- UL
- FCC part B

Operating Requirements
- Temperature: 0°C - +40°C
- Humidity: 5 ~ 90% relative humidity
**Ordering Information**

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Power Supply Options</th>
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<tbody>
<tr>
<td>ZNID-GPON-2402A-xx</td>
<td>Indoor GPON ONT, 2xGE; xx = NA, UK, EU</td>
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<tr>
<td>ZNID-GPON-2403A-xx</td>
<td>Indoor GPON ONT, 2xGE, 1xRF Video; xx = NA, UK, EU</td>
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<td>ZNID-GPON-2424A-xx</td>
<td>Indoor GPON ONT, 4xGE, 2xPOTS; xx = NA, UK, EU</td>
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<tr>
<td>ZNID-GPON-2425A-xx</td>
<td>Indoor GPON ONT, 4xGE, 2xPOTS, 1xRF Video; xx = NA, UK, EU</td>
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<tr>
<td>ZNID-GPON-2426A-xx</td>
<td>Indoor GPON ONT, 4xGE, 2xPOTS, WiFi; xx = NA, UK, EU</td>
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<tr>
<td>ZNID-GPON-2426A-xxR</td>
<td>Indoor GPON ONT, 4xGE, 2xPOTS, WiFi (removable antennas), xx = NA, EU</td>
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