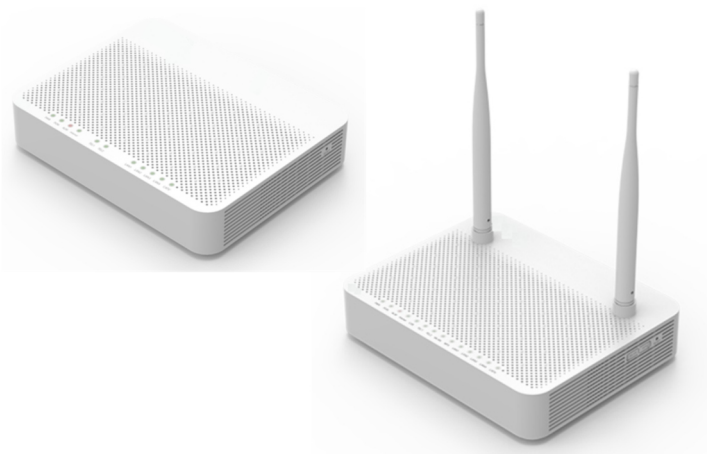


DATA SHEET

zNID-GPON-2425A1/2427A1

Indoor GPON ONT with RF Video



Features

- Standard ITU-T G.984 GPON
- RF Video Overlay
- Triple-Play QoS
- VoIP with CLASS 5 Features
- 802.11b/g/n WiFi

Overview

Introducing the newest members of the 2400A1 Series of indoor GPON ONTs- The 2425A1 and 2427A1 provide a low cost alternative in a compact design to support triple-play applications in Fiber-to-the-Home deployments.

The 2425A1 GPON ONT provides four 10/100/1000 Mbps LAN ports, two FXS Voice ports, and an RF Video port. The 2427A1 adds a 2x2 b/g/n (2.4GHz) WiFi radio and USB port.

The future-proof GPON optics include a WBF (wavelength-blocking filter) for coexistence with Next-Gen-PON ONTs.

The four Ethernet LAN ports can be used to support any-port-any-service model, or separated into different services allowing the configuration of dedicated ports for IP video and data.

The supported industry-standard SIP and MGCP VoIP signaling provides reliable voice services. DZS' experience with packet voice ensures interoperability and support with a large number of soft switches and with the ability to tailor the VoIP solution by selecting from a list of over 30 countries.

Flexible management means the 2400A1 GPON ONT may be provisioned using the same intuitive and easy-to-navigate Web interface and CLI as the 2400, 2600, 2700, 2800 and 4200 Series ONTs, as well as through GPON-standard OMCI, USP (Unified Service Provisioning), the DZS Network Management System (ZMS), or using a TR-069 compliant ACS. Software upgrades and configuration backups can be handled automatically by the ZMS using the CPE Manager feature.

Specifications

DIMENSIONS

- 190 x 40 x 150 mm (W x H x D)

POWER

- 12VDC, 1.5A max
- PSU: 100-240VAC, 50/60Hz, 12VDC, 24W out
- Round barrel-type connector for power input
- 2x4 Molex-type connector for optional BBU power input with alarm reporting

INTERFACES

Network Interface (GPON Uplink)

- SC/APC connector
- Full ITU-T G.984 compliance
- Class B+ optics
- G.985 wavelength blocking filter
- GPON Type B redundancy support
- Downstream data rate: 2.5 Gbps
- 1490 nm APD/TIA receiver
- Receiver sensitivity: -28 dBm
- Input power overload: -8 dBm
- Input power damage: +5 dBm
- Upstream data rate: 1.25Gbps
- 1310 nm DFB transmitter
- Launch power: +0.5 to +5 dBm

LAN Ports

- Four 10/100/1000Base-T LAN ports
- RJ-45 connectors
- Auto-MDI-X crossover control
- Auto-Speed or manual selection

POTS Ports

- Two FXS ports
- RJ-11 connectors
- 5 REN per line
- Battery voltage: -48VDC
- Max loop current: 40mA
- Ringing voltage: 48Vrms @ 20/25 Hz

USB Port

- One USB 2.0 port
- 3G dongle support for uplink fallback

INTERFACES (cont)

RF Video

- Standard F-type connector
- Optical wavelength: 1550 nm
- Input optical range: -8 to +2 dBm
- Input power overload: +5 dBm
- RF output impedance: 75 Ohms
- RF passband: 47 – 1,000MHz
- RF output level: 18 dBmV
- RF output AGC adjustment

WiFi – 802.11b/g/n

- 2.4 GHz band
- 2x2 MIMO
- 2 external antennas
- 100mW EIRP
- Channel width: 20 MHz, 40 MHz
- Max WiFi Connect (Phy) Rates: 54 Mbps (g); 300 Mbps (n)

MANAGEMENT

- OMCI
- Web UI
- CLI
- SNMP
- TR-069, TR-104, TR-98
- USP (Unified Service Provisioning)

VOICE SUPPORT

- SIP (RFC 3261)
- MGCP
- Codec: G.711 (u-law and A-law), G.729B, G726
- DTMF dialing
- 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.38 FAX support
- DHCP client or static IP configuration

Specifications (cont)

WIRELESS SUPPORT

- SSID support: 4
- Max number of subscribers: 64
- Authentication Security: WEP, WPA-PSK, WPA2,
- WPA2-PSK, 802.1x
- Encryption: WEP (64-bit, 128-bit), AES,
- TKIP+AES
- WPS modes: push-button, API PIN, STA PIN
- RADIUS Server support
- MAC address filtering
- Access Point and Wireless Bridge modes

PROTOCOL SUPPORT

GPON:

- Fully ITU-T G.984 compliant framing
- Dying Gasp support
- 32 T-CONTs per device
- 32 GEM Ports per device
- Activation with automatic discovered S/N and password in conformance with G.984.3
- AES-128 Decryption with key generation and switching
- FEC (Forward Error Correction)
- 802.1p mapper service profile on U/S
- Support for Multicast GEM Port

VLANs:

- Per port IEEE 802.1Q VLAN ID processing
- All VLAN IDs supported in Open Trunk Mode
- Max of 12 VLANs per port in Filtered Trunk Mode
- VLAN tagging/untagging
- VLAN Stacking (QinQ)
- VLAN Switching
- SSID to VLAN Mapping

IPTV:

- IGMP v3 Snooping
- VLAN support

QOS:

- Ethernet bridging/switching per IEEE 802.1d/802.1q
- Traffic management (priority queuing)
- QoS with support for IEEE 802.1p + DSCP VLANs

Layer 2:

- 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
- LLDP-MED

IP Routing and Firewall:

- PPPoE
- NAT/NAPT
- Port forwarding
- DHCP Server
- DNS Server
- UPnP

IPv6:

- IPv4 and IPv6 Dual-Stack-lite
- Bridged Mode (transparent pass-thru of IPv6 frames)
- IPv6 Support for BRouted, and PPPoE-Bridged VLANs
- DHCPv6 client and server
- Router Advertisement on LAN- side interfaces of BRouted and PPPoE-Bridged VLANs
- SLAAC for automatic acquisition of WAN-side IPv6 address and Gateway
- CLI and HTTP management via IPv6 address
- TR-069 management via IPv6 address.

Specifications (cont)

STANDARDS SUPPORT

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

REGULATORY COMPLIANCE

- CE
- UL/CSA
- FCC Part B
- 21 CFR 1040.10, 1040.11
- RoHS 2011/65/EU

OPERATING REQUIREMENTS

- Operating Temperature: -5C to +50C
- Storage Temperature: -30C to +60C
- Relative Humidity: 20 to 90%, non-condensing

Ordering Information

MODEL	DESCRIPTION
ZNID-GPON-2425A1-xx	Indoor GPON ONT, 4xGE, 2xPOTS, RF Video; xx = 00, EU, NA, UK power supply options
ZNID-GPON-2427A1-xx	Indoor GPON ONT, 4xGE, 2xPOTS, RF Video, USB, 802.11b/g/n WiFi; xx = 00, EU, NA, UK power supply options