DATA SHEET

zNID GPON 2424A1/2426A1/2428A1

DZS | EVERY CONNECTION MATTERS™

Overview

Introducing the newest mix of style and technology – the Zhone 2400A1 Series Indoor GPON ONT. Dual-band 802.11ac WiFi capability combines with a compact design to bring next-generation connectivity and best-of-class performance to Fiber-to-the-Home deployments.

Five internal high-gain antennas enable two radios (2.4 and 5.8 GHz) WiFi radios to independently connect multiple users and devices simultaneously, including older 802.11b/g/n devices.

The 2400A1 GPON ONT is ideal for providing WiFi coverage in homes, hotel guest and conference rooms facing a variety of laptops and mobile devices.

The 2424A1 GPON ONT provides four 10/100/1000Mbps LAN ports, two FXS Voice ports, and one 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. Unique VLANs may akso be configured per user to ensure full isolation of each department's data traffic. The 2426A1 GPON ONT adds an 2.4G WiFi. The 2428A1 GPON ONT has the most comprehensive feature set in the 24XXA1 family supporting 4xGE, 2X POTS, 2.4G and 5.8 WiFi.

The supported industry-standard SIP and MGCP VoIP signaling provides reliable voice services. Zhone's 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 Zhone 2400, 2600, 2700, 2800 and 4200 Series ONTs, as well as through GPON-standard OMCI, USP (Unified Service Provisioning), the Zhone 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

KEY FEATURES

- Standard ITU G.984 GPON
- Triple-Play QoS
- VoIP with CLASS 5 Features
- 802.11b/g/n/ac WiFi
- Lightning-fast WiFi speeds

DIMENSIONS AND WEIGHT

Dimensions (H x W x D)
  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

12VDC, 2.0A max
Power Supply: 100-240VAC, 50/60 Hz, 24W out
Round barrel-type connector for power input
2×4 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
GPON Tx:
– Upstream data rate 1.25 Gbps
– 1310 nm optics
– DFB transmitter
– Launch Power: +0.5 to +5 dBm
GPON Rx:
– Downstream data rate: 2.5 Gbps
– 1490 nm optics
– APD/TIA receiver
– Receiver Sensitivity: -28 dBm
– Input power overload: -8 dBm
– Input power damage: +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

WiFi – 802.11b/g/n:
– 2.4 GHz band
– 2×2 MIMO 3dBi internal antennas
– Channel width: 20 MHz, 40 MHz
WiFi – 802.11a/n/ac:
– 5 GHz band
– 3×3 MIMO 4dBi internal antennas
– Channel width: 20 MHz, 40 MHz, 80 MHz

USB Ports
– One USB 2.0 port
– 3G dongle support for uplink fallback

WIRELESS SUPPORT

SSIDs: 4 @ 2.4GHz + 4 @ 5.8GHz
Max number of subscribers: 64 per Radio
Max 2.4GHz Tx power: 100 mW (2426A1, 2428A1)
Max 5.8GHz Tx power: 400 mW (2428A1)
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

STANDARDS SUPPORT

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

VOICE SUPPORT

SIP (RFC 3261)
MGCP
Codec: G.711 (u-law and A-law), G.729B, G726
DTMF dialing
Echo cancellation

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 ITU-T 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
QOS:
– Ethernet bridging/switching per IEEE 802.1d/802.1q
– Traffic management (priority queuing)
– QoS with support for IEEE 802.1p + DSCP
VLANs:
– Per port IEEE 802.1Q VLAN ID processing
– All VLAN IDs supported
– VLAN tagging/untagging
– VLAN Stacking (QinQ)
– VLAN Switching
IPTV:
– IGMP v3 Snooping
– VLAN support
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

MANAGEMENT

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

REGULATORY COMPLIANCE

CE
UL/CSA

FCC Part B
21 CFR 1040.10, 1040.11
RoHS 2011/65/EU

OPERATING REQUIREMENTS

Operating Temperature: 0°C to +40°C
Storage Temperature: -20°C to +85°C
Relative Humidity: 0 to 95%, non-condensing

Ordering Information

MODEL	DESCRIPTION
ZNID-GPON-2424A1-xx	Indoor GPON ONT, 4xGE, 2xPOTS; xx = NA, UK, EU power supply options
ZNID-GPON-2426A1-xx	Indoor GPON ONT, 4xGE, 2xPOTS, 2x2 2.4GHz 802.11b/g/n; xx = NA, UK, EU power supply options
ZNID-GPON-2428A1-xx	Indoor GPON ONT, 4xGE, 2xPOTS, 2x2 2.4GHz 802.11b/g/n and 3x3 5.8Ghz 802.11a/n/ac; xx = NA, EU power supply options

Contact

DZS | EVERY CONNECTION MATTERS™

Purchase from Multicom MULTICOM www.multicominc.com | 800-423-2594