DATA SHEET

zNID-10GS-5225A

Indoor 10Gbit PON/AE ONT

Features

- Standard ITU-T G.9807.1 XGSPON
- Standard IEEE 802.3 10G AE
- Triple-Play QoS
- VoIP with CLASS 5 Features

Overview

Introducing the next generation of 10Gbit products designed for advanced triple-play deployments in home and business environments in a compact footprint. The SFP+ based uplink supports both symmetric 10/10 XGSPON and Active Ethernet technologies by simply swapping the optical transceiver.

The 5225A PON/AE ONT provides four 10/100/1000 Base-T and one 100/1000/2.5G/5G/10GBase-T LAN ports, as well as, two FXS voice ports.

All 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 also be configured per user to ensure full isolation of each customer's data traffic.

The supported industry-standard SIP 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 5225A ONT may be provisioned using the same intuitive and easy-to-navigate Web interface and CLI as the rest of the zNID family, as well as through 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

- 39 mm H x 158 mm W x 150 mm D
- 1.54 in H x 6.22 in W x 5.91 in D

WEIGHT

- 0.37kg, 0.81 lbs.

POWER

- 12VDC, 1.5A max
- PSU: 100-240VAC, 50/60Hz, 12VDC, 18W out
- Round barrel-type connector for power input
- 2×4 Molex-type connector for optional BBU power input with alarm reporting

INTERFACES

Network Interface

- 2x10 MSA-compliant SFP+ cage for PON or AE modules (optical transceiver not included)
- XGSPON req: ITU-T G.9807.1-compliant module. 10Gbps 1270nm burst-mode transmitter and 1577nm continues-mode receiver.
- 10G AE req: IEEE 802.3ae 10GBaseLR/LW-compliant module. 10Gbps 1310 DBF laser transmitter and PIN/TIA receiver.

LAN Ports

- Four 10/100/1000Base-T LAN ports
- One 100/1000/2.5G/5G/10GBase-T LAN port
- RJ-45 connectors
- Auto-MDI-X crossover control
- Auto-Speed or manual selection

INTERFACES (cont)

POTS Ports

- Two FXS ports
- RJ-14 connector (w/RJ-11 "Y" splitter)
- 5 REN per line
- Battery voltage: -48VDC
- Max loop current: 40mA
- Ringing voltage: 48Vrms @ 20/25 Hz

VOICE SUPPORT

- SIP (RFC 3261)
- 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

MANAGEMENT

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

Specifications (cont)

PROTOCOL SUPPORT

XGSPON:

- Fully ITU-T G.9807.1 compliant framing
- Ranging and activation process
- D/U 128-AES Encryption and key exchange
- D/U FEC, RS (248, 216)
- 32 T-CONTs per device
- 32 GEM Ports per device
- Support for Multicast GEM Port
- Downstream dedicated independent queues for PLOAM and CPU packets.
- Upstream normal queues for PLOAM and CPU packets.
- Dying Gasp support

Ethernet:

- IEEE 802.3an 10GBase-T
- IEEE 802.3bz 2.5G/5GBase-T
- IEEE 802.3ab 1000Base-T
- IEEE 802.3u 100Base-T
- IEEE 802.3az EEE
- IEEE 802.1p/q VLANs

VLANs:

- Per port IEEE 802.1Q VLAN ID processing
- All VLAN IDs supported in Open Trunk Mode
- Max of 24 VLANs per port in Filtered Trunk Mode
- VLAN tagging/untagging
- VLAN Stacking (QinQ)
- VLAN Switching

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)

REGULATORY COMPLIANCE

EMC:
- FCC Part 15 Class B
- ICES-003 Class B
- EN55022 Class B
- EN55024

Safety:
- UL60950-1
- CSA C22.2 No. 60950-1
- EN60950-1

Environmental:
- RoHS

OPERATING REQUIREMENTS

- Operating Temperature: -5C to +50C
- Storage Temperature: -40C to +85C
- Relative Humidity: 5 to 95%, non-condensing

Ordering Information

MODEL	DESCRIPTION
ZNID-10GS-5225A-xx	Indoor 10G PON/AE ONT, SFP+ WAN, 2xFXS POTS, 4xGE+1x10GE LAN xx = 00, EU, NA, UK power supply options
XCVR-XGS-SFP+-ONU-IA	XGSPON 10/10G ONU SFP+, 1270/1577NM SINGLE FIBER SC/UPC
MXK-10GE-SFP+-20KM-1310	SFP+ 10GBPS ETHERNET, 20KM, SM, 1310NM, DUPLEX LC/UPC