DZS

5225A

5225A XGS-PON/10GS AnyPON ONT

10 GigE ONT optimized for residential and small-business applications using DZS leading-edge xPON 10G technology.

Features & Benefits

+ Supports 10Gbps/10Gbps (Downstream/Upstream) with pluggable SFP+ WAN interface

+ One 10 gigabit multi-rate 100M/1G/2.5G/5G/10G Ethernet interfaces

+ Four gigabit multi-rate 10/100/1000M Ethernet interfaces

+ Two POTS interfaces compliant to SIP and MGPC telephony standards

+ Enterprise LAN features (802.1x, LLDP)

+ Fiber management tray option

The 5225A is the next generation of 10Gbit ONTs 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.

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 5225A AnyPON ONT provides four 10/100/1000 Base-T, one 100/1000/2.5G/5G/10GBase-T LAN ports, and two FXS RJ11 voice ports on one RJ11 interface. The ONT supports wire-speed L2 bridging and L3 gateway features, with carrier grade voice services with the option for DZS approved battery backup unit with battery status telemetry.

Service Scenario

The XGS-PON/10GS network consists of an 10G+ Optical Line Termination (OLT) located in a central location, and a set of Enterprise grade Optical Network Terminals (ONTs). All Ethernet LAN ports can be separated into different services allowing the configuration of dedicated ports for IP video and data for one or more business work groups or departments. Unique VLANs may be configured per user to ensure full isolation of each department's data traffic.

With LLDP-MED support for voice VLAN advertisement, 802.1x authentication, and DZS Dynamic VLAN Mapping capability for handling complex sets of packet classification rules, operators can expertly manage traffic on each ONT LAN port to provide optimum customer experiences.

Key Service Attributes

+ XGS-PON ITU-T G.9807.1-compliant interface or 10GS point-to-point Ethernet interface

+ Supports 10Gbps 1270nm burst-mode transmitter and 1577nm continues-mode receiver

+ One 10GBase-T Ethernet ports, RJ45 supporting 10Gbps symmetrical services

+ Four 10/100/1000MBase-T Ethernet ports, RJ45 supporting 1Gbps symmetrical services

+ Two voice ports, FXS interfaces compliant to ANSI and ETSI standards, SIP and MGCP

+ Support of Radius 802.1x, LLDP

+ IPTV multicast, IGMPv2 and IGMPv3 services

+ Any-port, Any-service data model

+ Traffic management including Q-in-Q tagging, 802.1Q VLANs, multiple subscriber VLANs, per-port rate limiting

+ 802.1p priority bits, DiffServ and priority ques based on services types.

+ OMCI and TR-069/TR-98 management

+ DZS Universal Service Provisioning (USP), ONT SNMP Client

+ Local Web UI, DZS CPE Manager feature set

+ +12 VDC uninterruptable service power source, option for battery backup

Product Specifications

Hardware

+ Dimensions
   Width: 6.2" (158mm)
   Depth: 5.9" (150mm)
   Height: 1.54" (39mm)
+ Weight 0.81 LB (0.37 kg)
+ 256GByte Flash Memory
+ 512GByte SDRAM (DDR3)
+ Capacity:10Gbps Down/1oGbps Up

Interfaces

+ WAN: 1 SFP+ cage, xPON or Ethernet
+ LAN: 1 port 100/1G/2.5G/5G/10GBase-T LAN, 4 ports 10/100/1000MBase-T Ethernet (RJ45)
+ Telephone: 1 ports 4-wire RJ11 (requires "Y" splitter)
+ Power: 1 2-pin barrel connector, 1 2x4 8-pin battery connector
+ LED Indicators
+ Recessed RESET button

XGS-PON/10GS

+ 1 x10 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
+ Forward Error Correction (FEC) per G.989.3
+ Dying Gasp

Ethernet LAN ports

+ Auto-MDI-X crossover control
+ Auto-Speed or manual selection
+ IEEE 802.3an 10GBase-T
+ IEEE 802.3bz 2.5G/5GBase-TIEEE
+ IEEE 802.3ab 1000Base-T
+ IEEE 802.3u 100Base-T
+ IEEE 802.3az EEE
+ IEEE 802.1x Authentication

Quality of Service

+ HW-based internal IEEE 802.1p (CoS)
+ Strict Priority (SP)
+ 802.1Q(VLAN tag) QoS mapping ToS/CoS
+ 8 queues per port
+ Classified traffic can be tagged with VLAN ID and Ethernet Priority bit, and can be assigned to priority queues
+ Classify packets into different IEEE 802.1p priority queues according to DSCP values (RFC 2475)
+ The range of traffic shaping or rate-limit shall between 64 Kbps to the maximum port rate with 64kbps granularity. The accuracy error shall be less than ±10%.
+ DSCP IP CoS (RFC 2475)

Telephone

+ SIP (RFC 3261)
+ MGCP
+ Codec: G.711 (u-law and A-law), G.729B, G726
+ RENs per line: 5 maximum
+ Drop length: Residential short loop, 152.4 m (500 ft.)
+ Output max: 25mA
+ Ring voltage: 48Vrms @ 20/25 Hz

Software Features

+ IEEE802.1D and IEEE802.1Q
+ Address learning with auto aging-L2/BPDU Filter
+ Support 4096 MAC learning addresses
+ Multiple T-CONTs/GEM ports per device
+ Flexible mapping between GEM port and T-CONT
+ Priority queues and scheduling on upstream
+ Activation with automatic discovered serial Number and password

IP Routing and Firewall

+ DHCP, Static-IP and PPPoE
+ NAT/NAPT
+ DNS Proxy
+ DHCP Server
+ UPnP, plug and play

IPv6

+ IPv4 and IPv6 Dual-Stack-Lite
+ Bridged Mode (transparent pass thru of IPv6 frames)
+ IPv6 support of BRouted and PPPoE Bridged VLANs
+ DHCPv6 client and server
+ Router Advertisement on LAN-side interfaces
+ SLAAC for automatic acquisition of WAN-side IPv6 addresses and GW
+ CLI, HTTP and TR-069 management via IPv6

Management

+ ITU-T 984.1/G988 compliant OMCI interface
+ CPE Manager Web UI
+ CLI over telnet
+ SNMP Client
+ TR-069, TR-104, TR-98
+ DZS Universal Service Provisioning
+ LED indications for status

Environmental

+ Storage temperature -40~121°F (-40~85°C)
+ Operating humidity 5 to 95% (non-condensing)
+ Altitude: –200 to 10,000 feet (–61 to 3,048 m) above sea level

Powering

+ DC power, 12VDC, 1.5A maximum
+ Input power, 100-240VAC, 50/60Hz, 12VDC, 18W out
+ Power consumption, ~14W maximum

Compliance

+ FCC Part 15 Class B
+ ICES-003 Class B
+ CE Mark
+ Safety ETL/Intertek
+ IEC 62368-1, UL 62368-1, EN 62368-1
+ FDA IEC 60825-1
+ RoHS 2015/863/EU

Ordering Information

Model	
5225A	1 x SFP+ cage, xPON and 10GS Ethernet
	1x 10G RJ45 port, 802.3at, PoE compliant
	4 x 1G RJ45 ports, 802.3at, PoE compliant
	1x 12VDC barrel connector, 2-pin power
	1x Optional 2x4 Molex Battery-Backup (BBU), 8-pin power
	-20 to +60°C
ZNID-10GS-5225A -NA	North America
ZNID-10GS-5225A -EU	EU
ZNID-10GS-5225A -UK	UK
ZNID-10GS-5225A -00	No power supply
XCVR-XGS-SFP+-ONU-IA	XGSPON 10/10G ONU SFP+, 1270NM TX, 1577NM RX SINGLE FIBER SC/APC
XCVR-AE-SFP+-SBD-1270-20KM-IA	ACTIVE ETHERNET 10GB/S SFP+, 1270NM TX, 1330NM RX, 20KM, SINGLE FIBER, LC/UPC

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