Enabling the hyper-connected world



H842

H842 XGS-PON ONT

The first generation of 10 Gigabit X-Series ONT enables subscribers to enjoy bandwidth-intensive multimedia services with leading-edge XGS-PON technology.

Features & Benefits

- Supports 10Gbps/10Gbps (Downstream/Upstream) with integrated XGS-PON WAN interface
- High-capacity multi-rate 1G/2.5G/5G/10G Ethernet interface
- One gigabit multi-rate 10/100/1000M Ethernet interface

The DZS H842 is a high-performance, XGS-PON compliant Optical Network Terminal (ONT) able to support service provider requirements for high-speed data and voice in a cost-effective design. The ONT is fully compliant with ITU-T G.9807.1 XGS-PON standard with integrated, on-board optics supporting 1270nm and 1577nm wavelengths with Class N1 type PMD optical receiver. With DZS's leading-edge XGS-PON technology, users can enjoy bandwidthintensive multimedia services such as real-time audio, and gaming much easier and faster than ever before.

The DZS H842 provides one SC/APC XGS-PON interface, one 1/2.5/5/10GBase-T port and one 10/100/1000Base-T port. The ONT contains an integrated L2 switch supporting wire-speed L2 bridging.

Advanced XGS-PON ONT

H842



Service Scenario

The XGS-PON network consists of an Optical Line Termination (OLT) located at the Central Office, and a set of residential Single-Family Unit (SFU) and Multi Dwelling Unit (MDU) locations with Optical Network Terminals (ONTs). Between them is the optical distribution network (ODN) comprised of fibers, passive optical splitters and couplers.

The H842 ONT support 10 Gigabit symmetrical data using the XGS-PON standard. Services include High-Speed Internet (HIS), Packet Voice, IPTV, OTT video, and cloud enabled services to multi-media devices.

Key Service Attributes

- + FSAN ITU-T G.9807.1 XGS-PON compliant
- + One 10GBase-T Ethernet port, RJ45 supporting 10Gbps symmetrical services
- + One 10/100/1000MBase-T Ethernet port, RJ45 supporting 1Gbps symmetrical services
- MTU jumbo frame 9216-byte support
- 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.
- + 12 VDC power adapter

Advanced XGS-PON ONT

H842



Product Specifications

Hardware

- + Dimensions Width: 6.3" (160mm) Depth: 5.5" (140mm) Height: 1.57" (40mm)
- + Weight 0.8 LB (0.36 kg)
- + 128GByte Flash Memory
- + 256GByte SDRAM (DDR3)
- + XGS-PON WAN Interface
- + Capacity:10Gbps Down/10Gbps Up

Interfaces

- + LAN: 1 port 1/2.5/5/10GBase-R Ethernet (RJ45), 1 port 10/100/1000 Base-T Ethernet (RJ45)
- + WAN: 1 port XGS-PON (AC/SPC)
- + LED Indicator: PWR/PON/ALM/Internet/ LAN
- + Button: Power, RESET

XGS-PON

- + ITU-T G.9807.1 compliant
- + Forward Error Correction (FEC)
- + 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
- + Dying Gasp

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)
- + CA ULCA, DLCA, and EN-DC
- The range of traffic shaping or ratelimit 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)

Software Features

- + IEEE802.1D and IEEE802.1Q
- + Address learning with auto aging-L2/BPDU Filter
- + Support at least 2048 MAC learning addresses

Environmental

- + Operating Temperature 32~104°F (-0~+40°C) Commercial
- + Storage temperature -4~149°F (-20~65°C)
- + Operating humidity 5 to 90% (noncondensing)
- + Altitude: -200 to 10,000 feet (-61 to 3,048 m) above sea level

Powering

- + DC power, +12 VDC nominal, 1.5A
- + Input power, 90-240VAC, 50/60Hz
- + Power consumption, ~12W maximum

Management

- + ITU-G984.4 compliant OMCI interface
- + IEEE802.3x flow control
- + LED indications for maintenance

Ordering Information

| Bases | |
|------------|--|
| H842 | XGS-PON (Class N1, ITU-T G.9807) |
| | 1x 1/2.5/5/10GBase-T, 1x 10/100/1000Base-T |
| | 1x 12VDC barrel connector, 2-pin power |
| | 0 to +40°C |
| HX-H842-NA | North America |
| HX-H842-EU | EU |
| HX-H842-UK | UK |
| HX-H842-00 | No power supply |

DZS Headquarters

Plano, TX USA info@DZSi.com www.DZSi.com/contact-us/

Contact DZS today

www.DZSi.com | support@DZSi.com

