8 Port 10G XGSPON OLT

with 2x 100G QSFP28, 4x 10G/25 SFP28 and 1x 1G RJ45 Uplink ports

XGSPON OLT-8XGS





Support 2048 ONU** 8x PON Port 1x 1G RJ45 Gigabit Uplink XG-PON XGS-PON ONU

2x 100G QSFP28 4x 10/25G SFP28 Uplink

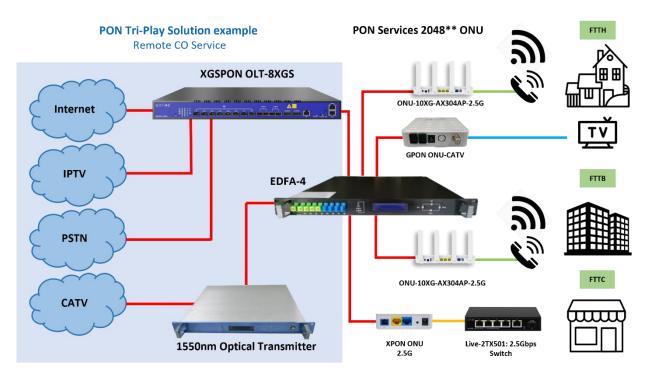
Fiber Optical 20KM Compliant ITU-T G.987/9807 standard

ONU auto discovery link

Overview

The XGSPON OLT-8XGS is a XG(S)-PON OLT that caters to new optical fiber communication networks. It conforms to international standards like ITU-T G.9807 (XGS-PON) and ITU-T G.987 (XG-PON) and supports two bandwidth access modes: 1. Asymmetric mode with 2.5Gbps upstream and 10Gbps downstream speed, and 2. Symmetrical mode with 10Gbps upstream and downstream speeds. It also support ITU-T G.984 (GPON) making triple mode possible. It is an ideal fit for high-bandwidth scenarios such as carrier networks, FTTx, and enterprise networks. The compact 1U chassis of the XGSPON OLT-8XGS makes it easy to deploy in tight spaces. Its Broadcom + NXP chipset solution ensures a robust performance. The OLT-8XGS boasts many ports, providing 2x 100G QSFP28, 4x 10/25G SFP28 and 1x 1G RJ45 uplink ports for full line-speed data forwarding. It also offers 8 XG(S)-PON downlink interfaces with a splitting ratio of 1:256** to access the user's ONT. This device is designed for use with applications the require the new higher data transfer speeds. To use XG(S)/GPON The Airlive XGS-PON/GPON Combo N2/C+ SFP+ module is needed. When using this module, the autosensing function in the OLT will set the correct speed for the connected XG/XGS/GPON ONU. All can used at the same time on a single PON port.





Highlight Feature

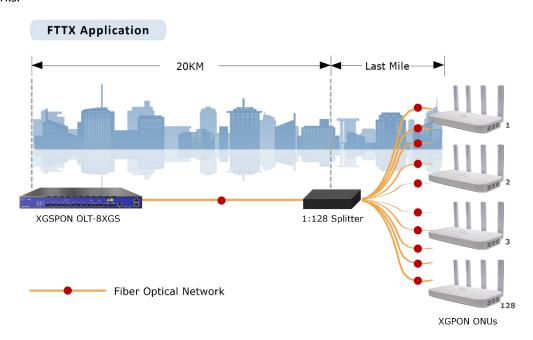
- Supports XGS-PON/XG-PON/GPON triple mode.
- GPON ONU: Upstream 1.2Gbps, Downstream: 2.5Gbps
- XG-PON ONU: Upstream 2.5Gbps, Downstream: 10Gbps
- XGS-PON ONU: Upstream 10Gbps, Downstream: 10Gbps
- 8 SFP+ PON ports, 2x 100G QSFP28, 4x 10/25G SFP28, 1x 1G RJ45, 1U 19"
- each PON port supports up to 256 ONUs, total up to 2048 ONUs**

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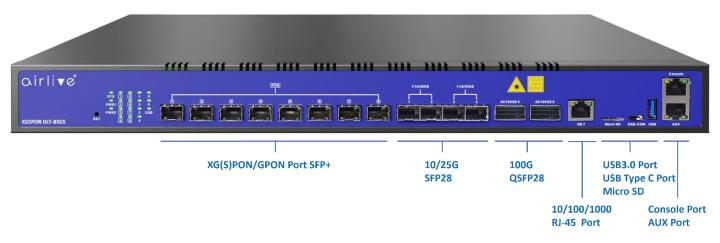
FTTX Application

XGSPON OLT-8XGS offers a complete, end-to-end network infrastructure application products for FTTX networks. From the CO to the customer premises, regional carriers, independent operators, municipalities, Multiple System Operators (MSOs), utilities, and developers worldwide have tapped the experience and innovation to build their FTTX networks.



High-speed and Long-distance Coverage for Triple Play Services

The XGSPON OLT-8XGS offers a robust solution for providing high-speed and long-distance coverage in triple play service applications such as HDTV, IPTV, voice-over-IP (VoIP), and multimedia. It supports downstream bandwidths of up to 10 Gbps and upstream bandwidths of 10 Gbps, enabling fast and reliable data transmission. With a coverage range of up to 20km between equipment nodes, the OLT-8XG is a cost-effective access technology that offers flexibility for network deployment. Its reliable and scalable network ensures a seamless and efficient experience for users. When using the Airlive XGSPON/GPON Combo N2/C+ SFP+ PON Module, XG/XGS and GPON onu's can all be connected to a single PON port allowing you more connection freedom.



Specification



Model

Device Interface

PON Port: 8x XG(S)-PON (SFP+) N2/C+

Uplink: 1x 1G RJ45

• **Uplink**: 4x 10/25G SFP28

Uplink: 2x 100G QSFP28

 Console: 1x 10/100/1000BASE-T out-band port, 1x Console RJ45 port, 1x USB-COM Type C USB Console port, 1x USB3.0 Port, 1x MicroSD slot

Fiber Type: 9/125µm SMF

Connector: SC/UPC

PON Port TX Power: GPON: +3dBm ~ +7dBm,

 $XG(S)PON + 4dBm \sim +7dBm$

PON Port RX Sensitivity: XGS-PON: -28dBm, XG-

PON: -29.5dBm, GPON: -32dBm

• PON Port Saturation Optical Power: XGS-PON:

-7dBm, XG-PON: -9dBm, GPON: -12dBm

Supported ONUs: 2048**

• PON port speed:

 ${\sf GPON\ ONU: Upstream\ 1.244Gbps,\ Downstream:}$

2.488Gbps

XG-PON ONU: Upstream 2.488Gbps, Downstream:

9.953Gbps

XGS-PON ONU: Upstream 9.953Gbps, Downstream: 9.953Gbps

 Wavelength: XG(S)-PON TX 1577nm, RX 1270nm GPON TX 1490nm, RX 1310nm

Max splitting ratio: 1:128 (module based)**

Transmission Distance: 20KMBackplane Bandwidth: 1960Gbps

Port Forwarding Rate: 566.928Mpps

Management Mode: CLI: (Console/Telnet/SSH), WEB

 Lightning protection level: Power supply 6KV/Device Interface 4KV

Firmware features

Management Function:

SNMP, Telnet, CLI, WEB, SSH v2

Fan Group Control

Port Status monitoring and configuration management

Online ONU configuration and management

User management

Alarm management

Layer2 Switch:

32K Mac address

Support 4096 VLANs

Support port VLAN and protocol VLAN

Support VLAN tag/Un-tag, VLAN transparent

transmission

Support VLAN translation and QinQ

* Specification will be changed without prior notice

8 Port 10G XGSPON OLT with 2x 100G QSFP28

Support storm control based on port

Support port isolation

Support port rate limitation

Support 802.1D and 802.1W

Support static LACP, Dynamic LACP

QoS based on port, VID, TOS and MAC address

Access control list

IEEE802.x flow control

Port stability statistic and monitoring

Multicast

IGMP Snooping

2048 IP Multicast Groups

DHCP

DHCP server, DHCP relay, DHCP snooping

DHCP option82

Layer 3 Route

ARP proxy

4096 hardware Host Routes, 512 hardware Subnet Routes

Support 802.1X, Radius, Tacacs+

Support IP source guard

Support static route, dynamic route RIP v1/v2, RIPng and OSPF v2/v3

IPv6

Support NDP;

Support IPv6 Ping, IPv6 Telnet, IPv6 routing;

Support ACL based on source IPv6 address, destination IPv6

address, L4 port, protocol type, etc;

Support MLD v1/v2 snooping(Multicast Listener Discovery snooping)

PON Function

T-CONT DBA

x-GEM traffic

In compliant with ITU-T G.9807 (XGS-PON), ITU-T G.987 (XG-PON) and with ITU-T G.984 (GPON).

Support Up to 20KM transmission distance

Support data encryption, multi-cast, port VLAN, separation, RSTP, etc.

Support ONU auto-discovery/link detection/remote upgrade of software.

Support VLAN division and user separation to avoid broadcast storm.

Support power-off alarm function, easy for link problem detection.

Support broadcasting storm resistance function.

Support port isolation between different ports.

Support ACL and SNMP to configure data packet filter flexibly

Specialized design for system breakdown prevention to maintain stable system.

Support RSTP, IGMP Proxy.



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Specification



Model

Power

- 1x AC 100~240V, 50/60Hz (Default)
- 2x AC 100~240V, 50/60Hz (Option)

Power Consumption

Power Usages Max: 150W

Environment

- Operating Temperature: -20°C to +60°C
- Storage Temperature: -40°C to +70°C
- Operating Humidity: 5%~95%, non-condensing
- Storage Humidity: 5%~95%, non-condensing
- MTBF: 200000 hrs.

Standard package of OLT

Product size:

44.2 x 33.0 x 4.36cm (L*W*H)

Package size: cm (L*W*H)

Package Weight:

N.W: 4.8kg; G.W: kg (Single Power)

Package content:

1 x Device, 1 x Power cord, Installation Kits, 1 x QIG.

Standard carton package

- Quantity: pcs / 1 carton
- Dimensions

cm (L*W*H)

Weight

kg (G.W)

Ordering Information

Model:

XGSPON OLT-8XGS

Name:

AirLive XGSPON OLT-8XGS 8 Port 10G XGSPON OLT with 2x 100G QSPF28, 4x 10/25G SFP28, 1x 1G RJ45

8 Port 10G XGSPON OLT with 100G QSFP28

NOTE

The OLT-8XGS supports GPON, XG-PON and XGS-PON triple play. The AirLive XG(S)PON/GPON Combo OLT SFP+ N2/C+ PON module is recommended to be used. All 3 modes can run at the same time.

The Max Splitting ratio is 1:256 for the OLT PON Port. But the XG/XGS/GPON Combo N2/C+ SFP+ PON module is currently limited to 1:128. This means only 128 XG/XGS ONU's can be connected per PON port.

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