### XGSPON OLT 2x XG(S)PON Ports with 2x 10G SFP+, 2x 1G RJ45, WDR1r built-in

**XGSPON OLT-2XGS-WDM** 





2X Support 256 ONU 2 x 10GE(SFP+)

2 x 1G RJ45

Uplink

XG(S)PON Port

**Optical 20KM** 

WDM1r Compliant ITU-T Fiber G.984/G.987/

**Built-in** 

G.9807 standard

GPON XG(S)-PON ONU **ONU** auto

Redundant Power (Option)

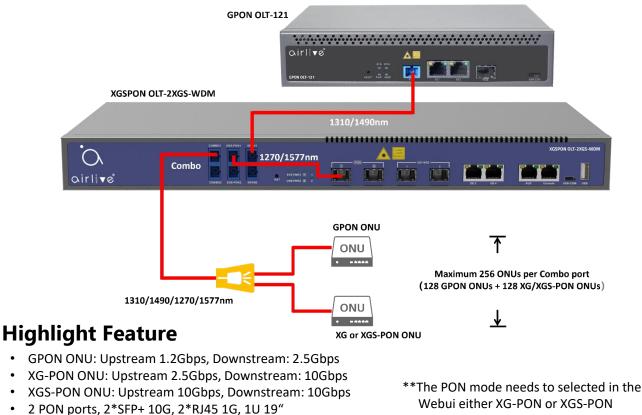
discovery link

## **Overview**

The AirLive XGSPON OLT-2XGS-WDM is a recently launched XG(S)-PON OLT with a built-in WDM1r combiner. 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). the OLT is compatible with existing GPON OLT and ODN networks, realizing the coexistence of GPON and XG-PON or XGS-PON, making full use of the existing resources, and enhancing the network scalability and cost-effectiveness. 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-2XGS-WDM makes it easy to deploy. Its Broadcom + NXP chipset solution ensures a robust performance.

The XGSPON OLT-2XGS-WDM boasts many ports, providing 2\*GE (RJ45) + 2\*10GE (SFP+) uplink ports for full line-speed data forwarding. It also offers 2 XG(S)-PON downlink interfaces with a splitting ratio of 1:128 to access the user's ONT. The Built-in WDR1r offers 2\* GPON Inputs and 2\* XG(S)-PON Inputs as well as 2\* Combo output ports.

This device is designed for use in FTTH (Fiber-to-the-Home) and small business applications the require the new higher data transfer speeds. You can still use your existing GPON OLT and link it to the OLT-2XGS-WDM GPON Input ports and combine the optical signal with the XG(S)-PON part of the OLT-2XGS-WDM. The Combo output ports can be connected to GPON and XG(S)-PON ONU's. To use XG/XGS PON a XG/XGS PON SFP+ module is needed. The OLT can only work with a single PON mode selected either XG or XGS, The GPON port will comes a GPON OLT.



- Each PON port supports up to 128 ONUs, total up to 256 ONUs\*\* Built-in WDM1r to combine GPON and XG(S)PON
- www.airlive.com

Mode also depends on the PON module used.

XGSPON OLT 2x XG(S)PON Ports

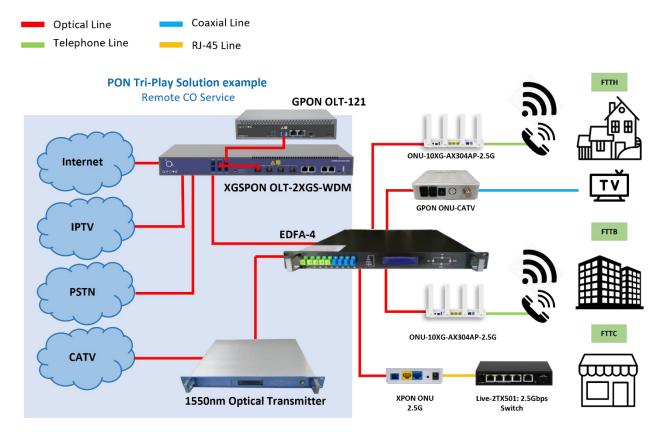
with 2x 10G SFP+, 2x 1G RJ45, WDR1r built-in

XGSPON OLT-2XGS-WDM

## **FTTX Application**

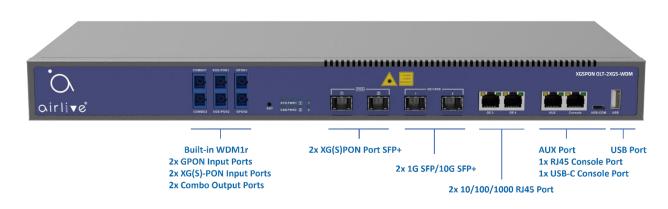
XGSPON OLT-2XGS-WDM offers a complete, end-to-end network infrastructure application products for FTTX networks. From the CO to the customer premises, regional carriers, independent operators, municipalities, Multiple System Operators (MSOs), utilities, and developers worldwide have tapped the experience and innovation to build their FTTX networks.

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

The XGSPON OLT-2XGS-WDM 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-2XGS-WDM 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.



# Specification

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### Model

### **Device Interface**

- PON Port: 2x XG(S)-PON (SFP+)
- Uplink: 2x 1G RJ45
- Uplink : 2x 10G SFP+ ٠
- Console: 1x 10/100/1000BASE-T out-band port RJ45, 1x Console RJ45 port, 1x Console USB-COM Type C port, 1x USB2.0 port
- Fiber Type: 9/125µm SMF •
- Connector: SC/UPC ٠
- Supported ONUs: 256\*\* ٠

#### PON port speed: •

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
- Optical splitting ratio: 1:256(Maximum) 1:128(Recommended) (module based)\*\*
- Transmission Distance: 20KM
- Built-in WDM1r: 2x GPON Input Ports 2x XG(S)-PON Input Ports
  - 2x Combo Output Ports
- Backplane Bandwidth: 208Gbps
- Port Forwarding Rate: 124.992Mpps •
- Management Mode: WEB, Telnet, CLI
- Mechanical: Solid metal 19" 1U rack-mountable

### **Firmware features**

### Management Function:

Telnet, CLI, WEB Fan Group Control

Port Status monitoring and configuration management Online ONU configuration and management User management Alarm management

### Layer2 Switch:

16K MAC address Support 4096 VLANs Support port VLAN Support VLAN tag/Un-tag, VLAN transparent transmission Support VLAN translation and QinQ Support storm control based on port Support port isolation Support port rate limitation

\* Specification will be changed without prior notice

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### **XGSPON OLT-2XGS-WDM**

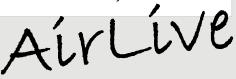
Support 802.1D and 802.1W Support static LACP, Dynamic LACP QoS based on port, VID, TOS and MAC address Access control list IEEE802.x flow control Port stability statistic and monitoring Multicast **IGMP Snooping** 1K L2 Multicast Groups & 1K L3 Multicast Groups DHCP DHCP server, DHCP relay, DHCP snooping DHCP option82 Layer 3 Route ARP proxy 16K hardware Host Routes, 1024 hardware Subnet Routes Support static route 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 **GEMport traffic** In compliance 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.



# Specification

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### Model

### Power

- 1x AC 100~240V, 50/60Hz (Default)
- 2x AC 100~240V, 50/60Hz (Option)
- 1x AC 100~240V, 1x DC 48V (Option)
- 2x DC 48V (Option)

### **Power Consumption**

• Power Usages Max: 40W

### Environment

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

### Standard package of OLT

- Product size: 44.2 x 20.0 x 4.36cm (L\*W\*H)
- Package size: 57.5 x 38.0 x 11.5cm (L\*W\*H)
- Package Weight: N.W: 2.485kg; G.W: 3.895kg (Single Power) •
  - Package content: 1 x Device, 1 x Power cord, Installation Kits, 1 x QIG.

### Standard carton package

- Quantity: pcs / 1 carton •
- Dimensions 57.5 x 38.0 x 11.5cm (L\*W\*H)
- Weight 3.895kg (G.W)

### **Ordering Information**

- Model: XGSPON OLT-2XGS-WDM •
  - Name: AirLive XGSPON OLT-2XGS-WDM 2x PON 10G XGSPON OLT with 10G SFP+ and WDM1r built-in

### 2 Port 10G XGSPON OLT with 10G SFP+

### \*\*NOTE\*\*

\*\*The OLT-2XGS-WDM supports GPON, XG-PON or XGS-PON. For XG or XGS Select the PON mode in the Webui of the OLT and make sure the correct module is used. Only 1 mode can be used at any given time. For XG or XGS-PON the AirLive XG(S)PON OLT SFP+ N1 module must be used. To use GPON a GPON OLT needs to connected to the GPON Input Ports of the OLT-2XGS-WDM.\*\*

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

