2 Port 10G XGSPON OLT with 10G SFP+

XGSPON OLT-2XGS

airlive®

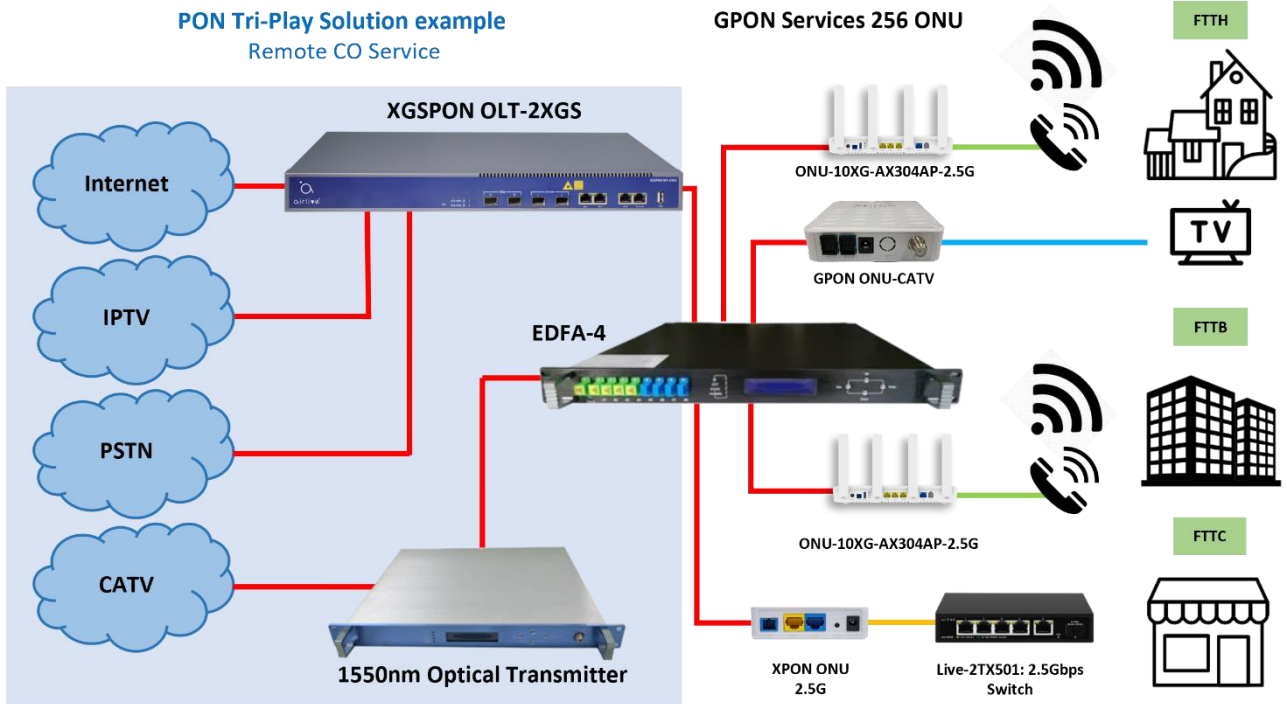| Support 256 ONU | 2x XG(S)PON Port | 2x Gigabit Uplink | XG-PON XGS-PON ONU | Redundant Power (Option) |
| 2x 10GE(SFP+) Uplink | Fiber Optical 20KM | Compliant ITU-T G.987/9807 standard | ONU auto discovery link | |

Overview

The AirLive XGSPON OLT-2XGS is a recently launched 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). 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 makes it easy to deploy. Its Broadcom + NXP chipset solution ensures a robust performance.

The XGSPON OLT-2XGS 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. This device is designed for use in FTTH (Fiber-to-the-Home) and small business applications the require the new higher data transfer speeds. To use XG/XGS PON a XG/XGS PON SFP+ module is needed. To use GPON a GPON PON SFP module is needed. The OLT can only work with a single PON mode selected either XG or XGS or GPON.

■ Optical Line
■ Telephone Line
■ Coaxial Line
■ RJ-45 Line

PON Tri-Play Solution example
Remote CO Service

GPON Services 256 ONU

XGSPON OLT-2XGS

Internet

IPTV

PSTN

CATV

EDFA-4

1550nm Optical Transmitter

ONU-10XG-AX304AP-2.5G

GPON ONU-CATV

ONU-10XG-AX304AP-2.5G

XPON ONU 2.5G

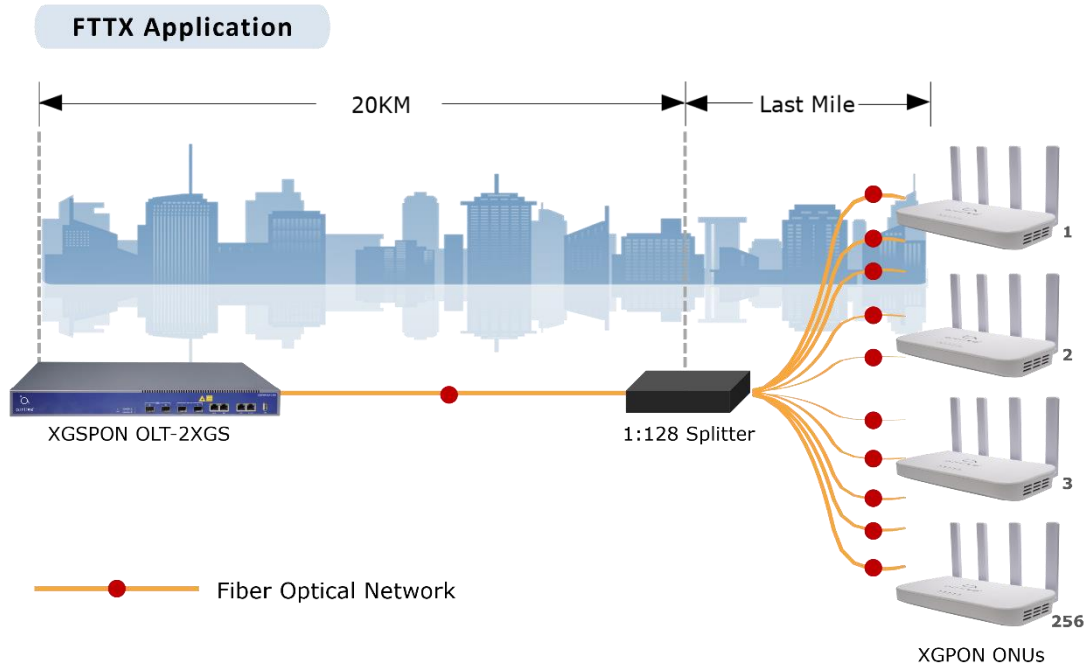Live-2TX501: 2.5Gbps Switch

FTTH

FTTB

FTTC

Highlight Feature

- GPON ONU: Upstream 1.2Gbps, Downstream: 2.5Gbps
- XG-PON ONU: Upstream 2.5Gbps, Downstream: 10Gbps
- XGS-PON ONU: Upstream 10Gbps, Downstream: 10Gbps
- 2 PON ports, 2*SFP+ 10G, 2*RJ45 1G, 1U 19"
- each PON port supports up to 128 ONUs, total up to 256 ONUs**

**The PON mode needs to selected in the Webui either GPON or XG-PON or XGS-PON Mode also depends on the PON module used.
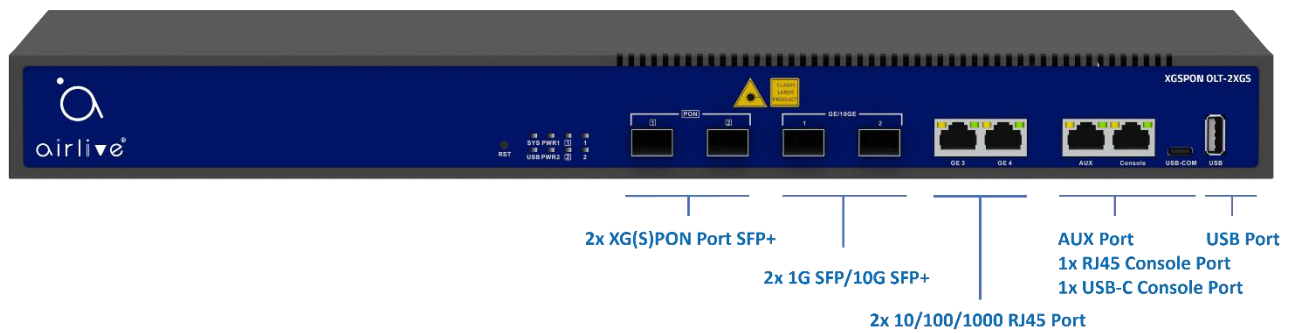
FTTX Application

XGSPON OLT-2XGS 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-2XGS 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 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.

2x XG(S)PON Port SFP+

2x 1G SFP/10G SFP+

2x 10/100/1000 RJ45 Port

AUX Port
1x RJ45 Console Port
1x USB-C Console Port

USB Port

Specification

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

Device Interface

- **PON Port**: 2x XG(S)-PON (SFP+)
- **Uplink**: 2x 1G RJ45
- **Uplink** : 2x 10G SFP+
- **Console**: 1x 10/100/1000BASE-T out-band port, 1x Console RJ45 port, 1x Console USB-COM Type C port, 1x USB2.0 port
- **Fiber Type**: 9/125μm SMF
- **Connector**: SC/UPC
- **Supported ONUs**: 256**
- **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
- **Max splitting ratio**: 1:128 (module based)**
- **Transmission Distance**: 20KM
- **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
  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.

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Specification

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

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
- **Name:**
  AirLive XGSPON OLT-2XGS 2 Port 10G XGSPON OLT with 10G SFP+

NOTE

The OLT-2XGS supports GPON or XG-PON or XGS-PON. Select the PON mode in the Webui of the OLT. 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. For GPON a GPON module like the GPON OLT SFP C++++ must be used.

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.

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