

8 Port 10G XGSPON OLT

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

XGSPON OLT-8XGS

airlive®



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

GPON to XG/XGS-PON: Seamless Evolution in a Single Port.

The AirLive XGSPON OLT-8XGS is an innovative 10G OLT product with 8x PON ports and XG (S) - PON&GPON Combo compatibility, giving you more networking possibilities and facilitating the flexibility to choose the appropriate bandwidth access mode according to current application conditions and future business upgrades. In the early stage of construction, you can choose to consider reducing investment costs and use any of the 8 PONs as pure GPON only with only GPON ONUs connected to the PON port, and then switch to XG(S)-PON&GPON Combo mode according to business needs in the future. This then offers a smooth upgrade from GPON to XG(S)-PON. Combo mode can also be directly offered in a new building setup, both GPON and XG(S)PON ONU's can be installed at the same time offering clients in the building internet at different price points according to their needs, but with the option to upgrade to a higher speed in the future.

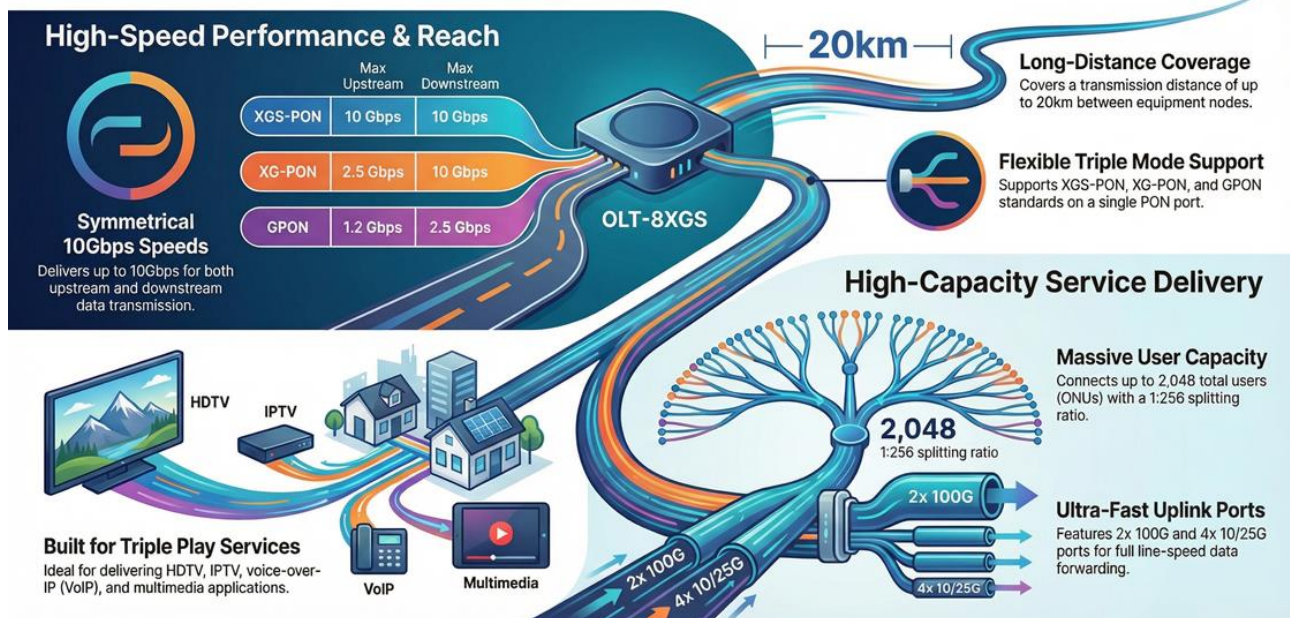
The XGSPON OLT-8XGS provides 1x 1G RJ-45, 4x 25G SFP28 and 2x 100G QSFP28 uplink ports to achieve full speed data forwarding and meet the needs of high-bandwidth, high-speed data transmission and large-scale deployment.

The OLT-8XGS conforms to international standards like ITU-T G.9807 (XGS-PON), ITU-T G.987 (XG-PON) and ITU-T G.984 (GPON)

Think of it like an optical prism: using a Combo module, a single fiber handles three network generations at once. You 100% protect past GPON investments while seamlessly delivering 10G speeds over the exact same line. From a monetization standpoint, XGS-PON delivers true symmetric 9.953 Gbps speeds. Eliminating the upstream bottleneck gives you a powerful competitive edge when targeting high-tier enterprise clients and cloud services.

Powering Next-Gen Networks: The XGSPON OLT-8XGS

High-performance Optical Line Terminal providing speed, range, and capacity for FTTx and Triple Play services.



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 RJ-45
- each PON port supports up to 256 ONUs, total up to 2048 ONUs, recommended is max 1024**

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XGSPON OLT-8XGS

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.

Powering Next-Generation FTTx Networks: The XGSPON OLT-8XGS

A high-performance Optical Line Terminal (OLT) that provides the speed, flexibility, and capacity for advanced "triple play" services in modern fiber optic networks.

GPON
(1.2Gbps/2.5Gbps)

XG-PON
(2.5Gbps/10Gbps)

XGS-PON
(10Gbps/10Gbps)

Triple-Mode Flexibility
Supports GPON, XG-PON, and XGS-PON standards on the same port simultaneously.

Core Capabilities

Symmetrical 10Gbps Speeds
Delivers up to 10Gbps upstream and downstream for demanding applications.

GPON	1.2 Gbps Up	2.5 Gbps Down
XG-PON	2.5 Gbps Up	10 Gbps Down
XGS-PON	10 Gbps Up	10 Gbps Down

High-Density Scalability
Connects up to 2048 total users.
Each of the 8 PON ports supports 256 connections.

FTTx Application: Delivering Triple Play Services

Central Office

Complete End-to-End Solution
Provides the core infrastructure for FTTx networks, from the central office to the customer.

Powers High-Bandwidth Services

HDTV & Multimedia Streaming
Ideal for delivering HDTV, IPTV, and multimedia streaming.

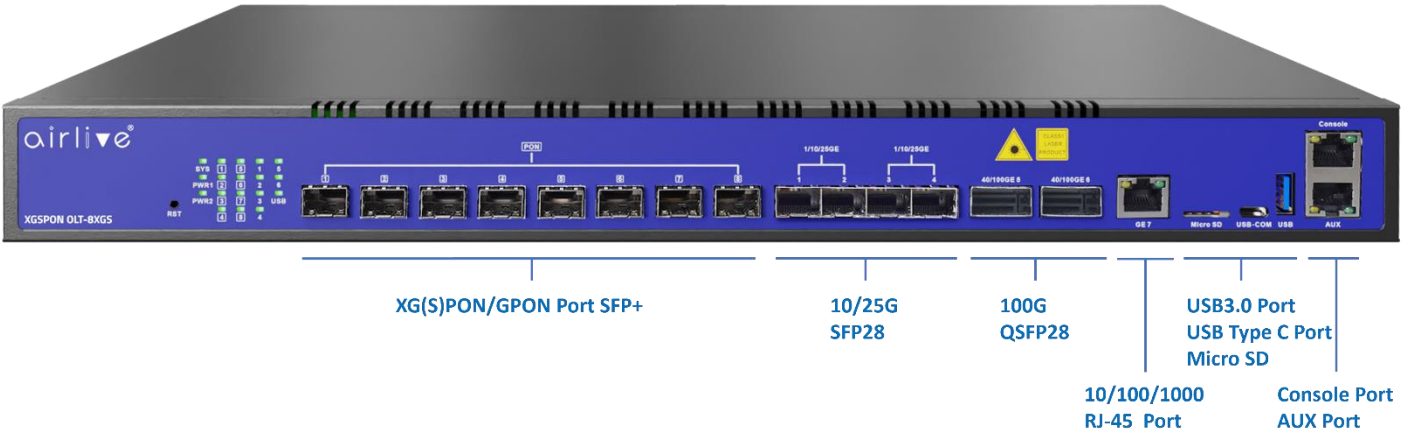
Voice-over-IP (VoIP)

High-Speed Internet

Long-Distance Coverage
Enables flexible and cost-effective network deployment with a range of up to 20km.

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.



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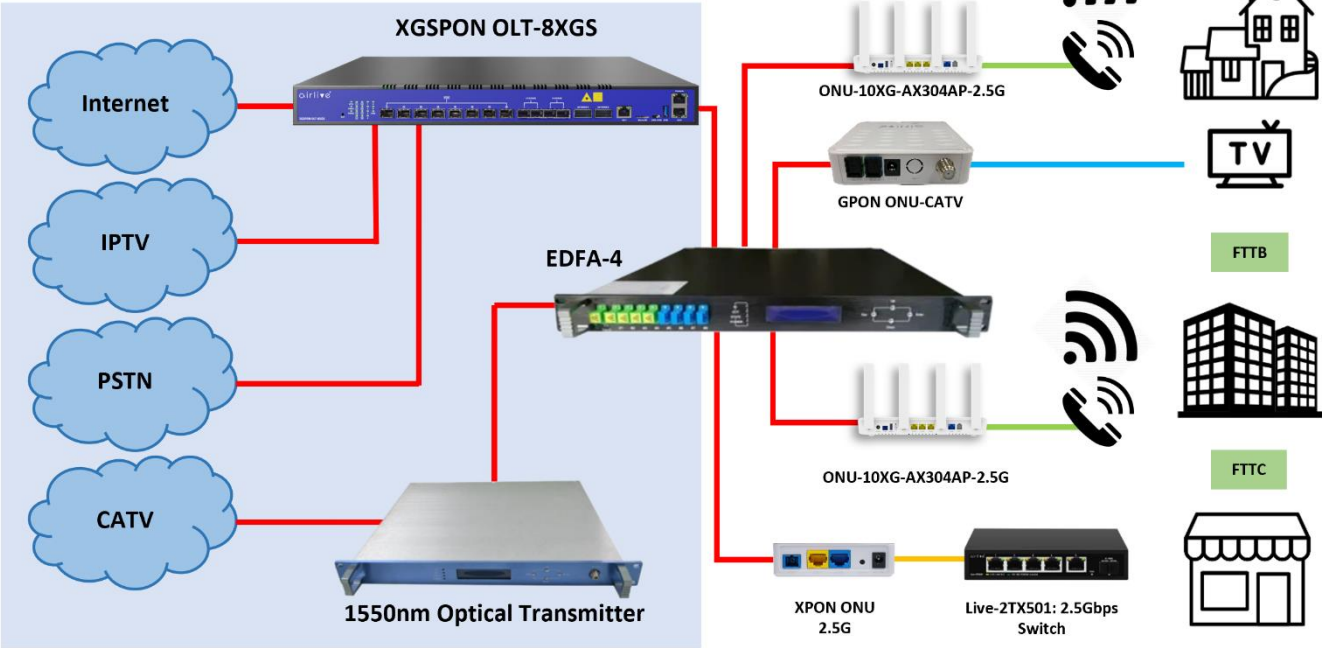
XGSPON OLT-8XGS

Full Integration

The XGSPON OLT-8XGS offers a complete, end-to-end network infrastructure application products for FTTH networks. Combined with the other AirLive Telecom and Network products it offers a complete solution for SOHO and Medium businesses.

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

PON Tri-Play Solution example Remote CO Service

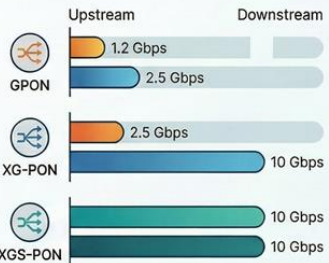


XGSPON OLT-8XGS: High-Speed Fiber Network Hub

Performance & Capacity

Triple-Mode Versatility

- GPON
- XG-PON
- XGS-PON
- Supports GPON, XG-PON, and XGS-PON standards simultaneously on a single PON port.



PON



High-Density User Support

Connects up to 2,048* total user devices (ONUs), with 128 per PON port.

Connectivity & Hardware

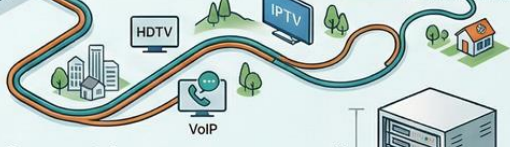
Extensive High-Speed Uplinks

Features 2x 100G QSFP28 ports and 4x 10G/25G SFP28 ports for uplink traffic.

100G QSFP28 10G/25G SFP28

20km Long-Distance Coverage

Enables flexible network deployment for services like HDTV, IPTV, and VoIP.



Compact & Deployable Design

A standard 1U 19-inch chassis allows for easy deployment in tight spaces.



Model	8 Port 10G XGSPON OLT with 2x 100G QSFP28
Device Interface • PON Port: 8x XG(S)-PON (SFP+) N2_C+ • Uplink: 1x 1G RJ45 • Uplink: 4x 10/25G SFP28 • Uplink: 2x 40/50/100G 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 ~ +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: 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: 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	- 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, RIPvng 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.

* Specification will be changed without prior notice

* All trademarks, logos and brand names are the property of their respective owners.

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Model	8 Port 10G XGSPON OLT with 100G QSFP28
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 QSFP28, 4x 10/25G SFP28, 1x 1G RJ-45	**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. To ensure stable performance, enough bandwidth, and easier network management, we normally recommend connecting no more than 128 ONUs per port.**

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