

# 1 Port 10G XGSPON OLT

with 1x 10G SFP+, 2x 1G RJ45 Uplink ports

XGSPON OLT-1XGS

airlive®



Support 128  
ONU

Single Combo  
PON Port

2x 1G RJ45  
Gigabit Uplink

G-PON  
XG(S)-PON  
ONU

1x 10G SFP+  
Uplink

Fiber  
Optical 20KM

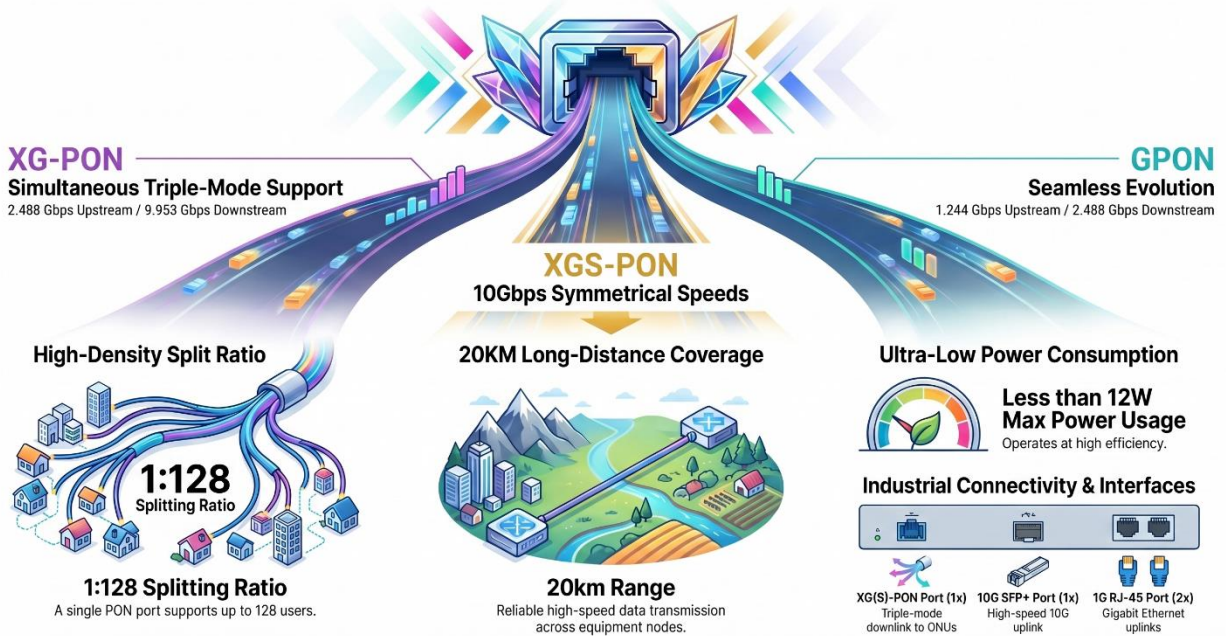
ONU auto  
discovery link

Compliant ITU-T  
G.984 /G.987/9807  
standard

## GPON to XG(S)-PON: Seamless Evolution in a Single Port.

The XGSPON OLT-1XGS 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 small to medium-scale scenarios such as upscale apartments, high-end SOHO and premium office, FTTH, and local building networks. The compact chassis of the XGSPON OLT-1XGS makes it easy to deploy in tight spaces. Its Realtek chipset solution ensures a robust performance. The OLT-1XGS boasts many ports, providing 1x 10G SFP+ and 2x 1G RJ45 uplink ports for full line-speed data forwarding. It also offers a single PON downlink interface with a splitting ratio of 1:128 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+ module is needed (comes default with the OLT). When using this module, the autosensing function in the OLT will set the correct speed for the connected XG/XGS/GPON ONU. All can be used at the same time on a single PON port.

## AirLive XGSPON OLT-1XGS: The Future of Fiber in One Port



## Highlight Feature

- Supports XGS-PON/XG-PON/GPON Triple mode.
- 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
- 1 PON port, 1x 10G SFP+, 2x 1G RJ-45
- PON port supports up to 128 ONUs
- Support WAN, NAT

# 1 Port 10G XGSPON OLT

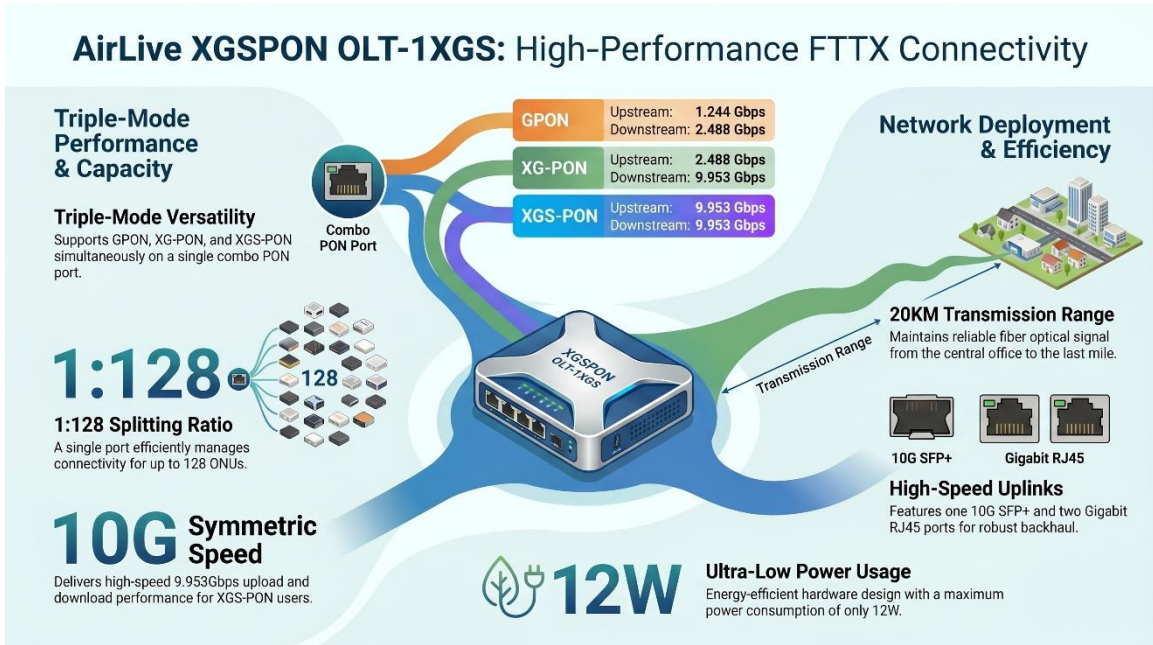
with 1x 10G SFP+, 2x 1G RJ45 Uplink ports

XGSPON OLT-1XGS



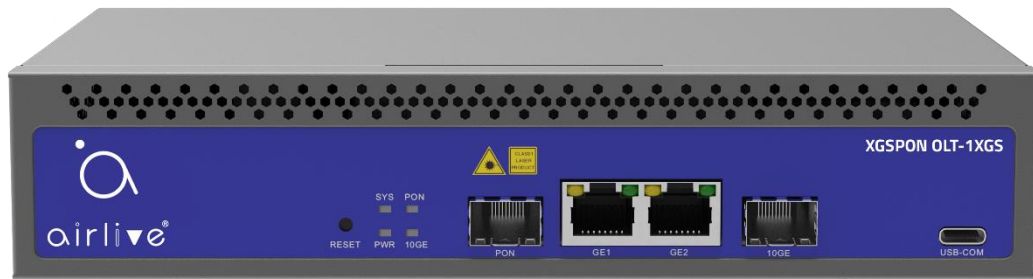
## FTTX Application

The XGSPON OLT-1XGS 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.

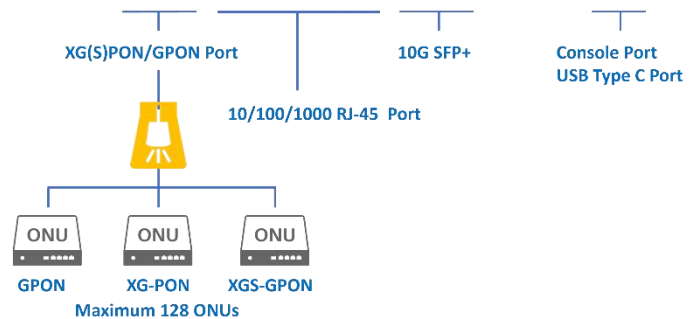


## High-speed and Long-distance Coverage for Triple Play Services

The XGSPON OLT-1XGS 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-1XGS 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 XG(S)PON/GPON Combo N2\_C+ 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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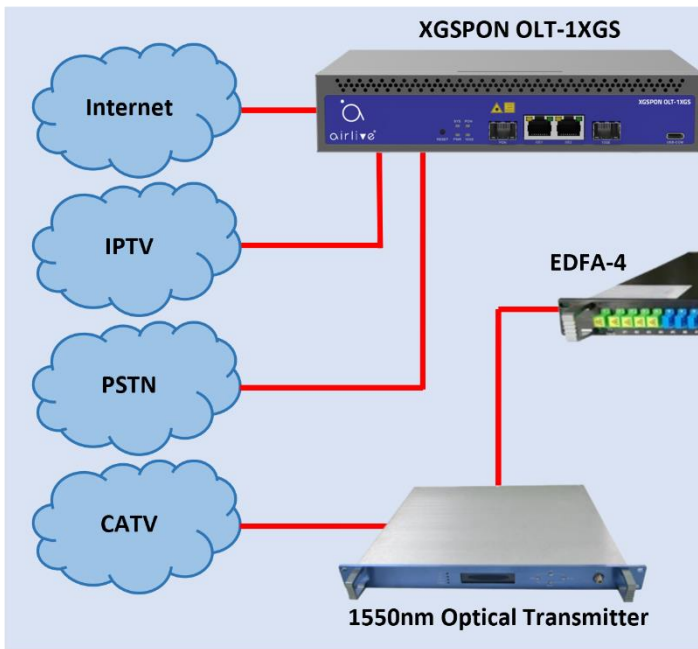


## Full Integration

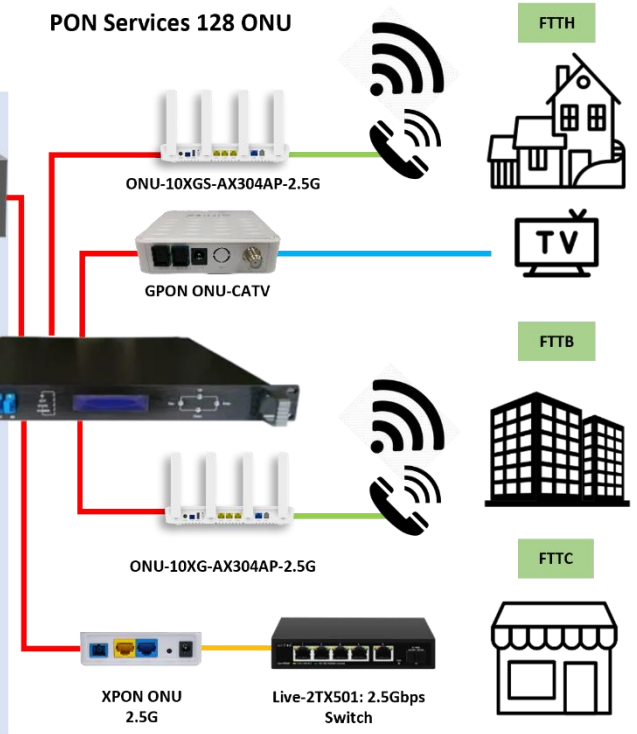
The XGSPON OLT-1XGS offers a complete, end-to-end network infrastructure application products for FTTH networks. Combined with the other AirLive Telecom and Network products it offers a complete solution for SOHO and Medium businesses.

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

PON Tri-Play Solution example  
Remote CO Service



PON Services 128 ONU



## Unified Fiber, Unlimited Speed: The Airlive XGSPON OLT-1XGS

### The All-in-One Fiber Solution

**3-Mode Auto-Sensing Technology:**  
Simultaneously supports GPON, XG-PON, and XGS-PON on a single combo PON port.

**GPON**  
Upstream: 1.244 Gbps  
Downstream: 2.488 Gbps

**XG-PON**  
Upstream: 2.488 Gbps  
Downstream: 9.953 Gbps

**XGS-PON**  
Upstream: 9.953 Gbps  
Downstream: 9.953 Gbps

Airlive XGSPON OLT-1XGS

### Triple Play Ready

HDTV, IPTV  
VoIP

VoIP  
Multimedia Services

### High-Capacity Performance

10 Gbps  
**10Gbps Symmetric Throughput**  
Supports upstream and downstream speeds for reliable transmission.

**Massive Scalability and Range**  
Efficiently manages up to 128 ONUs over a 20km long-distance coverage range.

**Ultra-Low Power Consumption**  
Maintains high-performance operations while consuming less than 12 Watts of power.

**Future-Proof Hardware Migration:**  
Eliminates the need for full network overhauls during standard upgrades.

Model	1 Port 10G XGSPON OLT with 1x 10G SFP+
<p><b>Device Interface</b></p> <ul style="list-style-type: none"> <li>• <b>PON Port:</b> 1x XG(S)-PON N2_C+ SFP+</li> <li>• <b>Uplink:</b> 2x 1G RJ-45</li> <li>• <b>Uplink:</b> 1x 10G SFP+</li> <li>• <b>Console:</b> 1x USB-COM Type C USB Console port</li> <li>• <b>Connector:</b> XG(S)-PON&amp;GPON Combo mode: N2_C+</li> <li>• <b>Supported ONUs:</b> 128</li> <li>• <b>PON port speed:</b> 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</li> <li>• <b>Wavelength:</b> XG(S)-PON TX 1577nm, RX 1270nm GPON TX 1490nm, RX 1310nm</li> <li>• <b>Max splitting ratio:</b> 1:128</li> <li>• <b>Transmission Distance:</b> 20KM</li> <li>• <b>Backplane Bandwidth:</b> 30Gbps</li> <li>• <b>Port Forwarding Rate:</b> 44.64Mpps</li> <li>• <b>Management Mode:</b> WEB/Telnet/CLI/SNMP</li> <li>• <b>Lightning protection level:</b> Power supply 6KV/Device Interface 4KV</li> </ul> <p><b>Firmware features</b></p> <ul style="list-style-type: none"> <li>• <b>Management Function:</b> SNMP, Telnet, CLI, WEB Port Status monitoring and configuration management Online ONU configuration and management User management Alarm management</li> <li>• <b>Layer2 Switch:</b> 8K MAC address Support 4096 VLANs Support port VLAN Support VLAN tag/Un-tag, VLAN transparent transmission Support VLAN translation, QinQ and P2P Support storm control based on port Support port isolation Support port rate limitation Support 802.1D and 802.1W Access control list IEEE802.x flow control Port stability statistic and monitoring</li> </ul>	<p><b>Multicast</b></p> <p>IGMP Snooping 256 IP Multicast Groups</p> <p><b>DHCP</b></p> <p>Support DHCP server, DHCP relay, DHCP snooping Support DHCP option82 Support DHCPv6 server, DHCPv6 relay</p> <p><b>Layer 3 Route</b></p> <p>Support Dynamic/Static ARP Support WAN (DHCP/PPPOE/Statics) Support static routing, NAT, DMZ Support QoS based on DSCP, MAC, IP, L4 port, protocol Support ACL based on Source MAC address, Source IP address, Source L4 port, Destination IP address, Destination L4 port, Protocol type</p> <p><b>IPv6</b></p> <p>Support IPv6 Ping, IPv6 Telnet, IPv6 routing; Support ACL based on source MAC address, Source IPv6 address, Source L4 port, Destination IPv6 address, Destination L4 port, Protocol type Support IPv6 SLAAC Support MLD v1/v2 snooping (Multicast Listener Discovery snooping)</p> <p><b>PON Function</b></p> <p>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 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.</p>

\* Specification will be changed without prior notice

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Model	1 Port 10G XGSPON OLT with 10G SFP+
<p><b>Power</b></p> <ul style="list-style-type: none"><li>• AC 100~240V, 50/60Hz (Default)</li><li>• DC 12V/1A (Optional)</li></ul> <p><b>Power Consumption</b></p> <ul style="list-style-type: none"><li>• <b>Power Usages Max:</b> ≤12W</li></ul> <p><b>Environment</b></p> <ul style="list-style-type: none"><li>• <b>Operating Temperature:</b> -20°C to +60°C</li><li>• <b>Storage Temperature:</b> -40°C to +70°C</li><li>• <b>Operating Humidity:</b> 5%~95%, non-condensing</li><li>• <b>Storage Humidity:</b> 5%~95%, non-condensing</li><li>• <b>MTBF:</b> 200000 hrs.</li></ul> <p><b>Standard package of OLT</b></p> <ul style="list-style-type: none"><li>• <b>Product size:</b> 21.0 x 17.3 x 4.36cm (L*W*H)</li><li>• <b>Package size:</b> cm (L*W*H)</li><li>• <b>Package Weight:</b> N.W: 1.07kg; G.W: kg (Single Power)</li><li>• <b>Package content:</b> 1 x Device, 1 x Power cord, Installation Kits, 1 x QIG.</li></ul> <p><b>Standard carton package</b></p> <ul style="list-style-type: none"><li>• <b>Quantity:</b> pcs / 1 carton</li><li>• <b>Dimensions</b> cm (L*W*H)</li><li>• <b>Weight</b> kg (G.W)</li></ul> <p><b>Ordering Information</b></p> <ul style="list-style-type: none"><li>• <b>Model:</b> XGSPON OLT-1XGS</li><li>• <b>Name:</b> AirLive XGSPON OLT-1XGS 1 Port XGSPON OLT with 1x 10G SFP+, 2x 1G RJ-45 Ports</li></ul>	<p><b>**NOTE**</b></p> <p>**The OLT-1XGS supports GPON, XG-PON and XGS-PON Triple play. The AirLive XG(S)-PON/GPON Combo Pon module which comes with the OLT is recommended to be used. All 3 modes can run at the same time.**</p>

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