ALPHA BRIDGE PIZZA BOX GPON OLT
AGL04-AF

✓ Verified Service characteristics, Versatile IPv6 solution, Complete Security Mechanism.

Advanced Hardware Architecture and Industry-leading Port Density.

GPON

Gigabit Passive optical networks have been a staple for service providers worldwide but have primarily focused on fibre to the home and metro Ethernet residential deployments. A number of different deployment scenarios have emerged that effectively leverage many of the strengths of the PON topology.

• Hospitality/healthcare

- Deliver end users predictable and stable connectivity.
- Offer data, voice, and video with the same infrastructure.
- Point-to-multipoint distribution network for scale.
- Simple and stable deployment in spread-out areas.

• Public sector

- Offer critical service and security dependencies to make sure the services are performing without any attack - Offer data, voice, and video with the same infrastructure.
- Simple and stable deployment in spread-out areas.

• Commercial buildings

- Highly available network infrastructure with energy efficiency and space savings.
- Cope with constantly changing environments without rewiring or additional investment.

Product Overview

ABTPL's PON series OLT's make refreshing your passive optical networks easy, which fully compliance with ITU-T G.984/G.988 standards. Coordinate with ABTPL's ONT, it completes the end-to-end optical last mile with up to 2.5Gbps bandwidth for triple play services to residential and business customers.

Key Benefits

Cost-effective Triple Play Transport

AGL04-AF supports up to 4 PON links, each delivering 2.5 Gbps (Downstream)/1.25Gbps (Upstream) of share bandwidth serving a maximum of 512 subscribers from a compact 1U chassis. It also supports 2 10GE SFP+ and 2 GE SFP interface for uplink. High subscriber density and low cost of entry, combined with the operational cost savings of GPON technology make ABTPL GPON a compelling alternative to legacy, last-mile access solutions.

Enriched Bandwidth Allocate Policy

AGL04-AF supports 1024 ALLOC-IDs and 4096 GEM-Ports. It supports 5 T-CONT types of compliance with ITU-T G.984.3 as well. The enriched QoS features such as traffic policy/traffic shaping/rate limit/Schedule allow operators to provision flexible bandwidth allocate policy for multiple customized service.
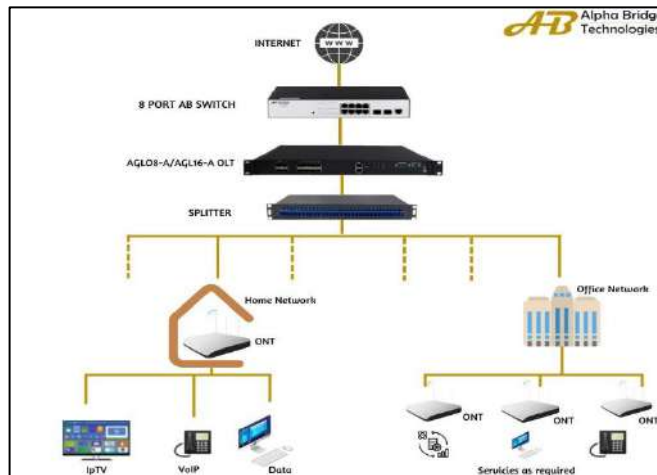
Flexible Provisioning, Quick to Revenue

AGL04-AF support SNMP/CLI for remote management. Powerful OMCI functions enable remote diagnostics, flexible provisioning, and reconfiguration of the ABTPL NMS platform.

Highlights

- ITU-T G.984/G.988 Compliant 2.5Gbps downstream and 1.25Gbps upstream GPON interface
- 1:128 splits, 512 subscribers in 1u box
- Pluggable power AC module
- Advanced L2/L3 functions
- Abundant QoS functions
- Unified and MS Platform
- Remote provision and management.

Product Specifications

Item	AGL04-AF
Physical specification	
Fan	Fan
Weight	4.2 KG
PON Interface	4
Size	482mm (W) x 293mm (D) x 44mm (H)
Power	AC: 100-200V, 0.5A, 50Hz
	Dual AC power redundancy
Infrastructure	1U chassis with CSM & Uplink & PON/ FAN/Anti-dust card
Console	1 RJ45(RS232) interface
Out band interface	1 RJ45 10/100Base-T interface
Uplink Interface	2*GE+ 2*10GE interface (optical)
PON Fiber Type	SM, BIDI
PON Interface Type	SC/UPC
Technical Parameters	
Switch Capacity	59 Gbps
Consumption	38W
Throughput	50.6 Mpps
Bandwidth	1.25Gbps (Upstream)
	2.5Gbps (Downstream)
PON Tx Power	3~7dBm(C+)
PON Rx Sensitivity	-30 dBm(C+)
PON Rx Overload	- 6 dBm (C+)
Wavelength	1490 nm (F1)
	1310 nm (E1)

Product Features

PON	Layer 2	Layer 3
Max Splitting Ratio: 1:128 Transmission distance: 20 km. 4096GEM Ports 1024T-CONT Support B+/C+PON transceiver SN / SN+ Password ONU authentication FEC ONU Digital Diagnostic Monitor Rogue ONU Detection	Support Port-based VLAN and Protocol-based VLAN, 802.1q VLAN Support 4094 VLANs 32K MAC address table ONU-based QinQ, 1:1 / N:1 VLAN translate LACP/LAG RSTP, IEEE802.x flow control; Port Mirror Flow control / Back pressure Support storm control based on port Wire-rate switch/forwarding Broadcast/DLF/Unknown Multicast storm control	Support Static Route, Support IP source guard Switch Virtual Interface (SVI) ARP proxy,2048 hardware Host Routes,2048 hardware Subnet Routes ICMP/Traceroute DHCP Server / DHCP Relay Static/Dynamic ARP
Multicast	**QoS (Quality of Service)**	**Security Management**
IGMPv1/v2 snooping MLDv1 snooping IGMP snooping with Proxy 1024 IP Multicast Groups Fast Leave 2K IGMP table	IEEE 802.1p, 8 CoS queue SP/WRR/SP+WRR IPv4 TOS/IP Precedence Classification/Shaping/Policy/Rate limit/Schedule DBA ONU-based bandwidth control in downstream	SSH V2.0 Support ACL to configure data packet filter flexibly User isolation Encryption in PON downstream IEEE 802.1x/Radius DHCP Option82 /PPPoE+
OAM	**Standard Complaint**	**Environment**
FTP/TFTP, SNMP v1 & v2c, Telnet, Console (CLI) In-band/Out-band Management Auto provision for ONU configuration PM	ITU-TG.984/G.988 IEEE802.1D, Spanning Tree IEEE802.1Q, VLAN IEEE802.1w, RSTP IEEE802.3ad, LACP Ethernet II	Operating Temperature：-5℃~45℃ Storage Temperature: -40℃~70℃ Relative Humidity： 10%~90% no condensing

Ordering Information

Item	Description
AGL04-AF	4*PON ports, 2*10GE+2*GE SFP uplink ports, 1 RJ45(RS232) Console interface, 1 RJ45 10/100Base-T out band Interface, Fan / Dual power (AC+AC); 1U chassis with CSM & Uplink & PON/Anti-dust card.

Alpha Bridge® Technologies