

ALPHA BRIDGE PIZZA BOX GPON OLT

AGL08-DF



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

AGL08-DF supports up to 8 PON links, each delivering 2.5 Gbps (Downstream)/1.25Gbps (Upstream) of share bandwidth serving a maximum of 1024 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

AGL08-DF 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

AGL08-DF 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, 1024 subscribers in 1u box
- DC power module
- Advanced L2/L3 functions
- Abundant QoS functions
- Unified and MS Platform
- Remote provision and management.

Product Specifications

Item	AGL08-DF
Physical specification	
Fan	Fan
Weight	4.2 KG
PON Interface	8
Size	482mm (W) x 293mm (D) x 44mm (H)
Power	DC: 48V, 0.5A, 50Hz
	Dual DC 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	74 Gbps
Consumption	65W
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°C~45°C Storage Temperature: -40°C~70°C Relative Humidity : 10%~90% no condensing

Ordering Information

Item	Description
AGL08-DF	8*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 (DC+DC); 1U chassis with CSM & Uplink & PON/Anti-dust card.

Copyright @ Alpha Bridge Technologies Private Limited

This document is ABTPL Public Information. ABTPL reserves the right to alter, update and otherwise change the information contained in the document from time to time.
www.alpha-bridge.tech