

ALPHA BRIDGE 4 PORT GPON OLT (AGL-04)



Verified Service
characteristics.



Supports Layer-2
Functions.



Advanced Hardware
Architecture and Industry-
leading Port Density.



4×GPON
4×GE RJ45
4×10G SFP+

Product Overview

G04R is a 1U box-type GPON OLT. The system has good stability and high reliability. It supports multiple management methods such as CLI, WEB, SNMP, etc. The product provides 4*GPON ports, 4*GE RJ45 uplink ports, 4*10G SFP+ slots, 1*GE Type-C port, and 1*GE/ETH combo interface.

Customers can deploy, configure, manage and monitor the equipment quickly, easily and remotely via the HSGQ Cloud, greatly reducing the labor and time cost in the network construction process.

It is suitable for sparsely populated, remote, cost-sensitive areas, smart industrial parks, commercial buildings, FTTM, etc.

Each GPON port supports a maximum split ratio of 1:128, supports up to 512 GPON users, and supports different types of ONUS under different networks.

The 1U height is easy to install and maintain. It is an excellent choice for customers to quickly deploy FTTH networks.

Product Features

- 32K MAC address table
- Complete network management functions
- Support flexible DBA, up and down traffic speed control.
- Support IP TOS, IEEE802.1Q
- Support port aggregation
- Support port-based traffic control, traffic shaping
- Support ONU automatic identification, auto-discovery, and auto-registration
- Support the automatic loop-back test function
- VLAN powerful features, including VLAN, QinQ and translation
- Flexible and controllable multicast support, support IGMP snooping
- Support ACL and QoS
- Support Cloud Management

Product Advantages

- Optical link diagnosis: complete warning mechanism
- High reliability: supports dual power supply (Default single power supply)
- Dimension: 1U cassette save space, low power consumption
- Uplink: support electrical and optical modules, can be flexibly configured according to different networking
- Capacity: Each PON supports up to 128 terminals, the whole device supports up to 512 ONUS under full configuration

Product Specifications

Interface	4×GPON 4x10/100/1000M RJ45 4×10G SFP+ 1×GE Type-C 1x USB 2.0 1×GE/ETH
PON	ITU-T G.984.2 GPON Class B+/C+/C++ Tx1490nm@2.488Gbps/Rx1310nm@1.244Gbps Max Split Ratio 1:128
Switching Capacity	107Gbps
Forwarding Rate	79.61Mpps
Management	ETH/Console (RS232 Serial)
Flash	32MB
DDR	512MB
Dimensions	442mm x 260mm x 44mm
Weight	<5kg
Standards	IEEE802.3(10Base-T) IEEE802.3u(100Base-TX) IEEE802.3z (1000BASE-X) IEEE802.3ab (1000Base-T) IEEE802.1q(VLAN)
Environment	Working Temperature: -10°C~55°C Storage Temperature: -40°C~85°C Humidity: 5%~95% Non condensing
Power Supply	AC 100-240V 50/60Hz / DC 48V Redundancy Design: AC+AC / AC+DC
Power Consumption	<50W
PON Features	DBA/Line/Service/TR069/SIP/Traffic Profile ONT Deny List (blacklist) Turn Off PON Port P2P Rough ONT detect ONT Batch upgrade

	IPHost ONT WAN Configuration (Private) ONT Port Configuration (Private) PON Transmission data encryption
Cloud Management	Device List Project Management Version Release License Management Permission Management
Configuration and Monitoring	CLI, WEB, SNMP, NMS, CLOUD Software and bootroom upgrade by TFTP and FTP Ping and diagnosis User, log, alarm management
L3 Function	Support RIP/RIPNG/OSPF/OSPFV3 Dynamic Route Support VRRPv2/VRRPv3 Support PIM SM/SSM Support DHCP Server, DHCP Snooping and DHCP Relay
L3 Function	Support VLAN, QinQ and translation Support at most 4094 VLAN Support Port mirror Support RSTP and MSTP (recover. Time <1s) Support Link aggregation (recover time <10ms) Support Storm control Support IGMP Snooping/proxy Support MAC Black Hole Support Port isolation Support ACL access control based on data stream QoS based on port, VID, TOS and MAC address

Ordering Information

Item	Description
AGL-04	4 * GPON port; 4 * 10/100/1000M Base-T; 4*10GE SFP+, Dual power supply optional (AC+DC, DC+DC);

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.alphabridge.tech V1.0 29 September 2025