ALPHA BRIDGE GPON ONT
AN6000/2/4/V/U/C

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.
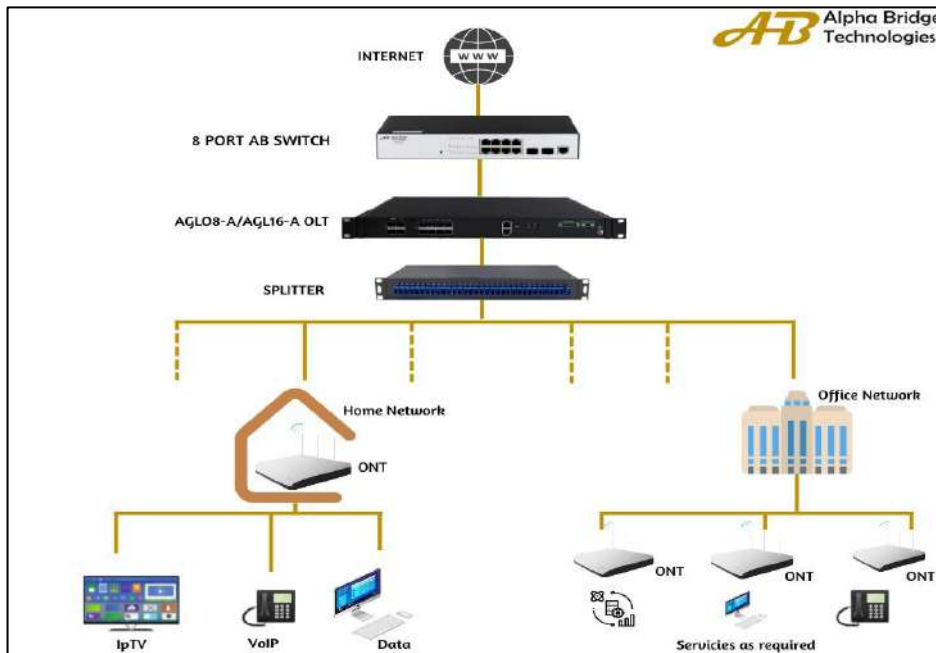
Product Overview

ABTPL's AN6000/2/4/V/U/C is a GPON optical terminal access device (AX3000Mbps) that is highly integrated with dual-frequency Wi-Fi6. It is the end-product of optical fiber for operators. It supports ultra-bandwidth access through GPON upstream technology and provides users with basic WIFI functions, routing, and gigabit Ethernet functions. The upstream network ports of the AN6000/2/4/V/U/C are GPON ports. The downstream user ports include four GE electrical ports, one USB port, one VOIP port, one CATV port and WiFi6 WLAN ports.

Interface function

- 1 * GPON interface: SC/UPC/APC interface, GPON standard
- 4 * Ethernet interface: 10/ 100/ 1000 Mbps, RJ - 45, IEEE802.3-2005 standard
- 1 * VOIP interface: in accordance with G. 711 a/u, G. 729 a/b, G. 722 standard
- 1 * USB interface: standard USB 3.0 interface
- Dual-band WIFI6(2*2 MIMO (2.4G & 5G))
- 1*CATV, C/N:≥43dB, C/CTB:≥55dB, C/CSO≥55dB, MER≥32dB, BER≤1*10E-6

Product Specifications

Hardware Parameters		Wifi 6 (AX3000)	
LED	POWER+PON/LOS+NET+LAN+POTS+WiFi+WPS+USB	WiFi protocol	2.4GHz supports 802.11b/g/n 5GHz supports 802.11a/n/ac/ax
Port	4*RJ45 (GE)	Transmit power	2.4G 100mW, 5G/200mW
	1*RJ11 (POTS)	Antenna gain	5dBi
	1*Reset+1*Power +1*LED button+1*WiFi Button +1*WPS	Antenna	dual-antenna MIMO (2*2) (2.4G & 5G)
	1*SC/UPC (or SC/APC)	WLAN penetrate	One reinforced concrete wall or two ordinary brick walls (non-reinforced concrete)
	1*CATV	WLAN access capability	64 /SSID
	1*DC	channel	2.4GHz (channel 1-13) 5GHZ (channel 36-161)
	1*USB 3.0	WPS	WLAN terminal devices with WPS Push Button function establish connection within 2 minutes
Size	190mm*135mm*33mm(L*W*H)	WLAN security function	WPA-PSK, WPA2-PSK, WPA3, WPA-PSK/WPA2-PSK AES, AES+TKIP
Memory	512MB DDR3	Air speed	574 Mbps (2.4GHz), 2402
Consumption	≤ 8W		
Flash	256MB NAND		
Interface Parameters			
Ethernet Port	Ethernet port-based VLAN tags and tag removal, VLAN transparent and mark, MAC address learning, 10/100/1000Mbps Auto negotiation		
VoIP Port	Call waiting, Inconditional Call Forward, Call Forward if Busy, Call Forward if no reply and Three-party calls. G711A/G711U/G729/G722 SDP protocol (RFC 2327 and RFC 4566) T.30/T.38/G.711 fax mode, DTMF		
CATV			
Optional AGC	-10 ~ +2dBm		
Remote control CATV	ON/OFF		
Output Level	76dBuV		
RF bandwidth	47 – 1000 MHz		
In band Flatness	±1.25dB		
Output return loss	≥ 12dB		
CATV system parameters	C/N : ≥ 43dB , C/CTB : ≥ 55dB , C/CSO ≥ 55dB , MER ≥ 32dB , BER ≤ 1*10E-6		

Product Features

GPON	QoS	Layer 2 Features
ITU-T G.984.1-4, ITU-T G.988/TR255/TR156, 15 TCONTs /256GEM ports, 8 Egress queues per TCONT at least, VLAN/ priority/VEIP gem mapping mode, SN/LOID/SN+ Password, authentication Performance, monitoring: eth/Gem port Dying gasp	Support 8 Queues with Strict Priority, Ethernet port rate limitation, 802.1p priority, SP/WRR, Service flow classification	MAC learning (SVL)/aging Support max frame length to 1518 bytes VLAN tagging for untagged packets Support VLAN 1-4094 VLAN transparent/translation

Layer 3 Features	Multicast	Management
PPPoE/Static IP/DHCP, NAT/NAPT, Port forwarding ALG, UPnP, DDNS, IPv6/IPv4 dual stack, and DS-Lite Static/Default routes, Multiple services on one WAN port, RIPv2 with passive mode	IGMP v2 (RFC 2236) and IGMP v3 (RFC 3376) IGMP snooping and IGMP, Proxy MLD v1/v2	OMCI/Web UI/TR069, Telnet/SSH management with CLI commands Dual-system software backup and rollback

		Environment
		Storage Temperature: -20 ^{O}C - 70 ^{O}C Operating Humidity: 5%-95% (non-Condensing) Power Supply: 12V/1.5A

Ordering Information

Item	Description
AN6000/2/4/V/U/C	4*RJ45 Ports, 1 RJ11 Port, 1*CATV port, 1*Reset+1*Power +1*LED button+1*WiFi button+1*WPS, 1*SC/UPC (or SC/APC), 1*USB 3.0, 1*DC, DC Power Supply: 12V/1.5A