

10G 1RU

Modular XGSPON

combo OLT



AX1700 Series

- **ITU-T G.984.X
G.9807.Xcompliant**
- **8/16 GPON/XGSPON combo
port**
- **Advanced L2 functions**
- **Abundant QoS functions**
- **CLI, Telnet and Web GUI**
- **Remote provision and
management**

The AX1700 series is a modular pizza box platform supporting GPON, XGPON, XGSPON, and compliant with ITU-T G.984.X and G.9807.X standards. It delivers a complete 10Gbps optical last-mile solution for residential and business services.

The AX1700 features a modular design with two service card slots for GPON or XGSPON combo and one management card slot, enabling flexibility and seamless upgrades. It supports up to 16 XG(S)PON & GPON combo PON ports in a compact 1RU form factor, offering high subscriber density and cost-effective deployment. Leveraging GPON technology, it provides a compelling alternative to traditional last-mile access solutions, reducing both initial and operational costs.

Additionally, the AX1700 supports CLI, WEB, Telnet, and SSH for secure, efficient, and intelligent network management. This ensures stable, rapid, and streamlined operation and maintenance, significantly boosting overall network efficiency for users, enterprises, and operators.

Key Features

GPON/XGSPON Function

- Support OMCI protocol
- T-CONT DBA
- GEMPORT traffic
- ONU auto discover
- Ranging function
- Downstream data encrypted

Layer 2 Switching Function

- Access/Trunk/Hybrid L2 access mode
- Support 64K MAC address
- Support 4094 VLANs
- VLAN filter function,VLAN transform
- Smart QinQ
- L2 port mirror
- Support 1024 static MAC address
- MAC address learning/aging
- MAC address limitation
- Static/Dynamic LACP
- ACL
- RSTP

Layer 3 Switching Function

- Static routing
- DHCP server/DHCP relay/DHCP snooping
- ARP proxy

Multicast Function

- IGMP snooping
- IGMP V1/V2/V3
- Multicast VLAN translation
- Multicast QOS
- IGMP protocol

QOS Guarantee

- Traffic control function
- Congestion avoidance function
- Queue scheduling function
- COS Priority function
- ACL function

Reliability Function

- 1+1 power modules
- BBU optional
- Fan speed automatically adjusts based on temperature
- Enables manual adjustment for primary and secondary power sources

Management Function

- CLI/WEB/Telnet/SSH
- Performance Management
- Alarm Management
- Security Management

Maintenance Function

- Device log
- Device upgrade
- Fault diagnose function
- Condition monitoring function

Specifications

Parameter		Description
Hardware		
Uplink Port		4*1G(SFP)/10G SFP+, 4*10G(SFP+)/25G(SFP28) or 2*1G(SFP)/10G (SFP +) 2*40G(QSFP+)/100G(QSFP28)
Management Port		1*100/1000BASE-Tx out-band Ethernet port 1*CONSOLE local management port
PON Port		4*GPON/8*GPON/16*GPON/24*GPON/32*GPON/8*XG(S)PON/ 16*XG(S)PON combo Note: AX1700 has two service card slots.
	Physical Interface	SFP slot
	Interface Protocol	GPON: ITU-TG.984.2 XGSPON: ITU_G.9807.x
	Max Splitting Ratio	GPON: 1:128 XGSPON: 1:256
PON Port Attribute	Transmission Distance	20KM
	Port Rate	GPON: Downstream: 2.5Gbps Upstream: 1.25Gbps XGSPON: Downstream: 10Gbps Upstream: 10Gbps
	Wavelength	GPON: 1490nm/1310nm XGSPON: 1270nm/1577nm
	Interface Type	SC/UPC
	Fiber Type	9/125μm SMF (Single Mode Fiber)
	Transmit	XGSPON&GPON combo 5 to 8dBm (9.953G) 3 to 7dBm (2.488G)
	Receiving Sensitivity	XGSPON&GPON combo ≥-29dBm (9.953G) ≥-30.5dBm (2.488G) ≥-30dBm (1.244G)
	Saturation Power	XGSPON&GPON combo ≤-8dBm (9.953G) ≤-10dBm (2.488G) ≤-12dBm (1.244G)
Power Supply		
AC		100V to 240V
DC		-40V to -72V
Power Consumption		145W(typical)
Environment		
Working Temperature		-15°C to 50°C
Storage Temperature		-40°C to 85°C
Ambient Humidity		5 to 90% (Non-condensing)
Mechanics		
Management Rack		1U 19-inch standard chassis
Dimensions		440 * 375 * 44mm
Weight		6kg

AX1700 Key Modules

Chassis, PS and Fans

AX1700-CH-AC2

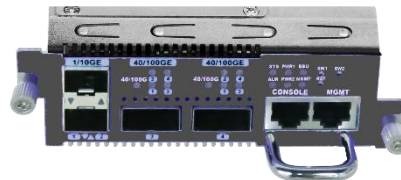
AX1700, 1U Pizza Box 10GPON OLT
Chassis Dual AC PS, with FAN



Control Boards

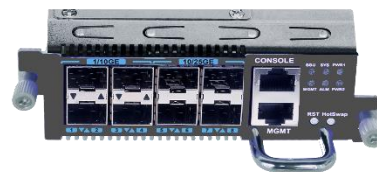
AX1700-MB220

AX1700 Chassis Management Board
2*1G(SFP)/10G (SFP +)
2*40G(QSFP+)/100G(QSFP28)



AX1700-MB140

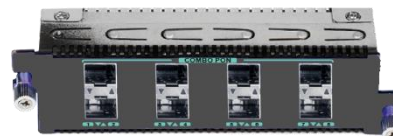
AX1700 Chassis Management Board
4*1G(SFP)/10G (SFP +)
4 *10G(SFP)/25G(SFP28)



Service Boards

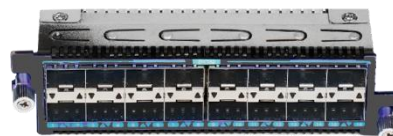
AX1700-XC08

AX1700 XGSPON combo Service
Board
8*GPON/XGSPON combo Ports



AX1700-GP16

AX1700 GPON Serviec Board
16*GPON Ports



AX1700-GP08

AX1700 GPON Serviec Board
8*GPON Ports

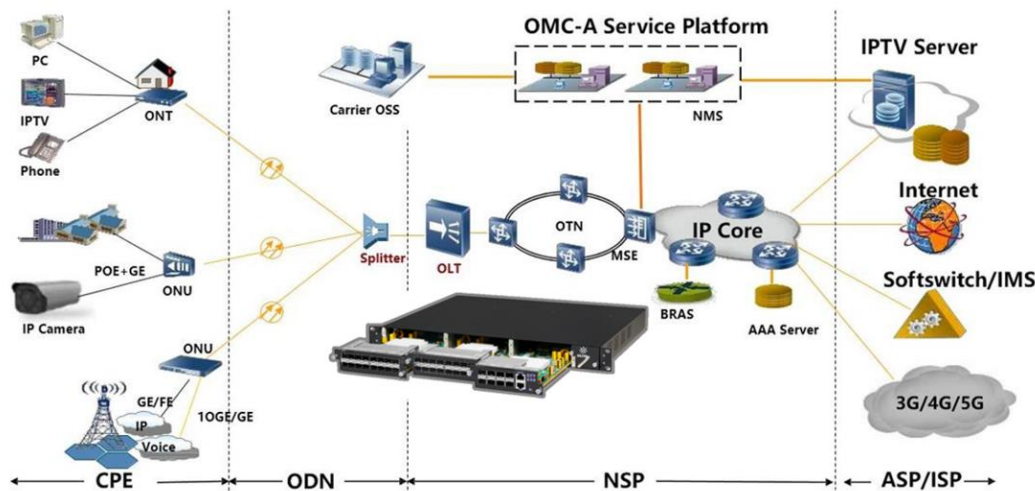


AX1700-GP04

AX1700 GPON Serviec Board
4*GPON Ports



Application Diagram



Ordering Information

Product Name	Product Description
AX1700-CH-AC2	AX1700 1U Pizza Box 10GPON OLT Chassis, dual AC PS, with Fan
AX1700-MB140	AX1700 Chassis Management Board, 4*1G(SFP)/10G (SFP +), 4*10G(SFP)/25G(SFP28)
AX1700-MB220	AX1700 Chassis Management Board 2*1G(SFP)/10G (SFP +), 2*40G(QSFP+)/100G(QSFP28)
AX1700-GP04	AX1700 GPON Service Board, 4*GPON Ports
AX1700-GP08	AX1700 GPON Serviec Board, 8*GPON Ports
AX1700-GP16	AX1700 GPON Serviec Board, 16*GPON Ports
AX1700-XC08	AX1700 XGSPON combo Service Board, 8*GPON/XGSPON combo Ports
AX1708X-AC2	AX1708 1RU 10G PON OLT, Uplink 2*10G + 2*100G, 8*XG(S)PON&GPON combo ports, Dual AC
AX1708X-DC2	AX1708 1RU 10G PON OLT, Uplink 2*10G + 2*100G, 8*XG(S)PON&GPON combo ports, Dual DC
AX1716X-AC2	AX1716 1RU 10G PON OLT, Uplink 2*10G + 2*100G, 16*XG(S)PON&GPON combo ports, Dual AC
AX1716X-DC2	AX1716 1RU 10G PON OLT, Uplink 2*10G + 2*100G, 16*XG(S)PON&GPON combo ports, Dual DC

Contact Information



Ascent Communication Technology Ltd

AUSTRALIA

140 William Street, Melbourne
Victoria 3000, AUSTRALIA
Phone: +61-3-8691 2902

Hong Kong SAR

Room 1210, 12th Floor, Wing Tuck Commercial Centre
181 Wing Lok Street, Sheung Wan , Hong Kong SAR
Phone: +852-2851 4722

CHINA

Unit 1933, 600 Luban Road
200023, Shanghai, CHINA
Phone: +86-21-60232616

USA

2710 Thomes Ave
Cheyenne, WY 82001, USA
Phone: +1 203 350 9822

EUROPE

Pfarrer-Bensheimer-Strasse 7a
55129 Mainz, GERMANY
Phone: +49 (0) 6136 926 3246

VIETNAM

11th Floor, Hoa Binh Office Tower
106 Hoang Quoc Viet Street, Nghia Do Ward
Cau Giay District, Hanoi 10649, VIETNAM
Phone: +84-24-37955917

WEB: www.ascentcomtec.com

EMAIL: sales@ascentcomtec.com

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