

4GE+1POTS+ CATV+Wi-Fi 5 AC1200 XPON ONU



AP214C Series

- **Compliant with IEEE802.3ah and ITU - T G.984 standard**
- **Port VLAN configuration**
- **Broadcasting storm resistance function**
- **Dynamic Bandwidth Allocation(DBA)**
- **EMS network management based on SNMP ,convenient for maintenance**

The AP214C Series XPON ONU is a high-performance fiber broadband gateway designed to deliver quad-play services including Internet, Voice, CATV, and Wi-Fi over a single fiber connection. Integrating dual-mode GPON/EPON technology, four Gigabit Ethernet ports, one POTS voice interface, RF CATV output, and dual-band AC1200 Wi-Fi, the AP214C provides a comprehensive FTTH solution for residential and multi-service broadband deployments. The ONU automatically adapts to GPON or EPON networks and offers seamless interoperability with mainstream OLT platforms.

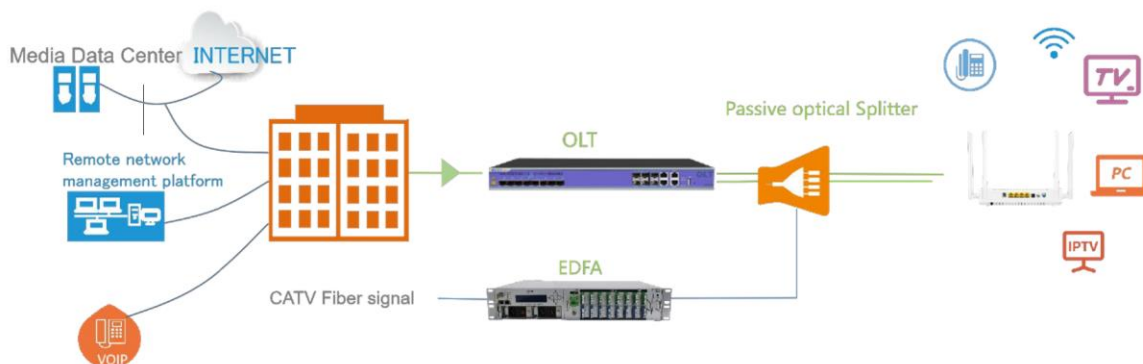
The AP214C combines high-speed data access, VoIP communication, CATV distribution, and wireless networking within a single compact device. Equipped with one XPON optical interface, four Gigabit Ethernet ports, one SIP-based voice port, and an integrated CATV receiver supporting 1550nm optical input, the ONU enables operators to efficiently deliver broadband, IPTV, voice, and broadcast television services. Advanced networking features including VLAN, QoS, IGMP Snooping/Proxy, Dynamic Bandwidth Allocation (DBA), AES encryption, firewall protection, and SNMP-based management ensure reliable performance and simplified network operation.

Designed for carrier-grade deployment, the AP214C supports ONU auto-discovery, remote provisioning, software upgrades, CATV remote management, and multiple authentication methods including SN and LOID+Password. Its integrated service architecture, low power consumption, and AC1200 dual-band wireless performance make it an ideal solution for operators seeking to deliver converged voice, video, data, and Wi-Fi services through a single customer premises device.

Key Features

- Compliant with IEEE802.3ah and ITU - T G.984 standard
- Support ONU auto-discovery/Link detection/remote upgrade of software
- Support SN and LOID+Password multiple registration methods
- Support port VLAN configuration
- Support port-based rate limitation and bandwidth control
- Support MAC address learning
- Support MAC address learning account limit
- Support VLAN transparent/tag/translate/trunk
- Support remote CATV port management
- Support broadcasting storm resistance function
- Support igmp transparent/snooping/proxy mode
- Support Dynamic Bandwidth Allocation(DBA)
- Support AES encryption and decryption
- EMS network management based on SNMP, convenient for maintenance
- Support power-off alarm function, easy for link problem detection
- Support Firewall
- Support MAC address/URL filter
- Support remote WEB/Telnet access control
- Single-fiber access provides internet, VOIP, CATV, WIFI, multiple service

Application Diagram



Specifications

Parameter	Description
Hardware	
User Port(LAN)	RJ-45 connector 4*10/100/1000Mbps adaptive Ethernet port Full/Half Duplex Auto MDI/MDI-X
Indicators	
PON Port	PON Mode EPON: 1000BASE-PX20+ symmetric GPON: FSAN G.984.2 standard, Class B+
	Port Rate EPON: 1.25Gbps downstream/upstream GPON: 2.488Gbps/1.244Gbps downstream/upstream
	Wavelength Transmit: 1310nm Receiver: 1490nm
	Receiving Sensitivity EPON: -27dBm GPON: -28dBm
	Saturation Power EPON: -3dBm GPON: -8dBm
	Transmitting Power EPON: 0 to 4dBm GPON: 0.5 to 5dBm
Power	
Adapter	External 12VDC/1.5A power supply adapter
Power Consumption	≤11.7W
Environment	
Working Temperature	0°C to 40°C
Operating Humidity	10 to 90%(Non-condensing)
CATV(Input /Output port)	
Wavelength	1550nm
Input Optical Power	-18dBm to 0dBm(with AGC)
RF Frequency	47MHz to 1000MHz
RF Output Level	78dBuV (@-12 to -2dBm@85MHz) (with AGC)
RF Output Return Loss	>12dB(with AGC)
RF Impedance	75Ω
User Port(POTS)	
Port	RJ-11 connector 1 x FXS Voice Port SIP protocol DTMF G711U/G711A/G729/G722 encoding and decoding
WIFI Performance	
WIFI	IEEE802.11b/g/n(2.4G), IEEE802.11a/n/ac(5G)
Max Rate	300M(2.4G) 867Mbps(5G)
MAX TX Power	17dBm(2.4G/5G)
Mechanics	
Dimensions	210mm(L) x 135mm(W) x 45mm(H)
Weight	About 300g

Ordering Information

Product Name	Product Description
AP214C-GE-TV-C-S-2	AP200C GPON CPE 1xPON(1.25G US, 2.5G DS), 4xGE, 1POTS, CATV, WIFI b/g/n/ac, Single Fiber, SC/PC, PS included

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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