GPON ONT

1 GE+WiFi

AP201CW Series

- **FTTH, FTTB, PON + EOC**
- **ITU-T G.984 compliant**
- **1 × auto-adapting GE port**
- **802.11 b/g/n WiFi**
- **DBA support**
- **VLAN Configurations**
- **Web-based GUI**
- **Auto-negotiation and MDI/MDIX**
- **Broadband internet, VoIP, IPTV, VOD, IP camera, WiFi**

AP201CW GPON HGU ONT is a GPON optical network unit designed to meet the requirements of broadband access networks. It is ideal for FTTH/FTTO applications to provide data, voice, and video services based on a GPON network.

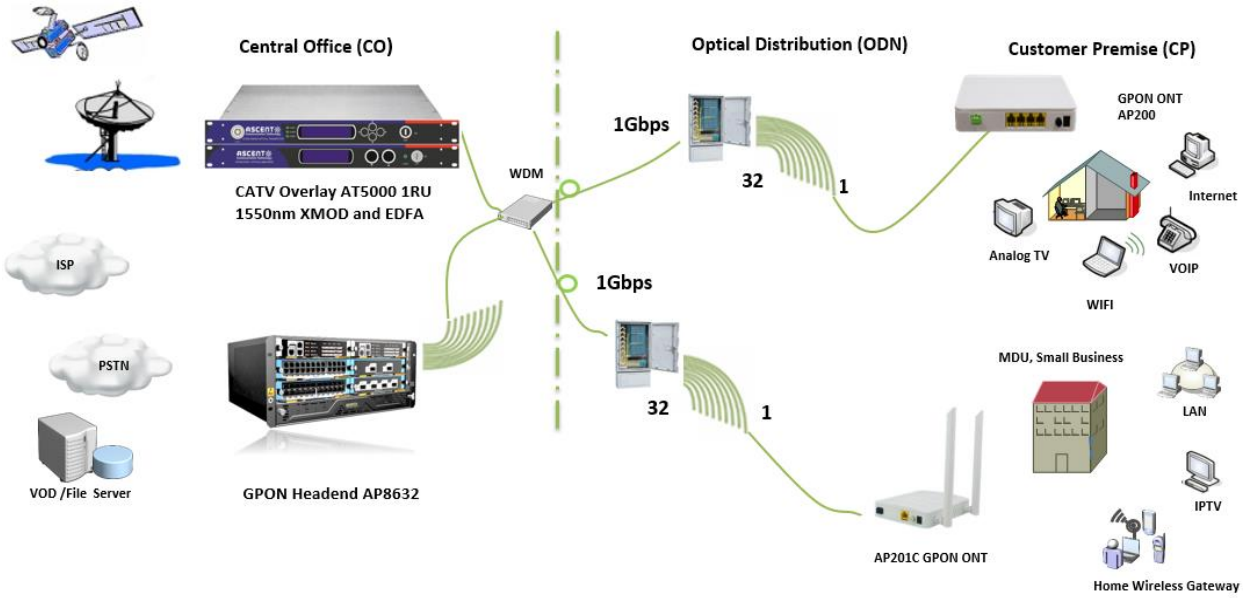
AP201CW GPON ONT meets the ITU-T G.984 GPON standard and delivers higher bandwidth and higher efficiency using larger variable-length packets. It provides one GE auto-adapting Ethernet ports and one 802.11 n/b/g Wi-Fi port. It features high-performance forwarding capabilities to ensure excellent experience with VoIP, internet, and HD video services. AP201C provides a perfect terminal solution and future-oriented service supporting capabilities for FTTH deployment.

AP201CW offers efficient packaging of user traffic, with frame segmentation allowing higher quality of service (QoS) for delay-sensitive voice and video communications traffic. AP200CW series GPON ONT provides the reliability and performance expected for business services and are an attractive way to deliver residential services. GPON enables Fiber to The Home (FTTH) deployments economically resulting to accelerated growth worldwide.

Key Features

- Supports port-based rate limitation and bandwidth control
- In compliant with ITU - T G.984 standard
- Wi-Fi meet 802.11 b/g/n technical standards
- Supports data encryption, group broadcasting, port VLAN separation, etc.
- Supports Dynamic Bandwidth Allocation (DBA)
- Supports ONU auto-discovery/link detection/remote upgrade of software
- Supports port mode for VLAN configurations
- Supports power-off alarm function, easy for link problem detection
- Supports broadcasting storm resistance function
- Supports port isolation between different ports
- Supports port flow control
- Supports ACL and SNMP to configure data packet filter flexibly
- Specialized design for system breakdown prevention to maintain stable system
- Supports software online upgrading
- EMS network management based on SNMP, convenient for maintenance

Application Diagram



Specifications

PON Port	1 × GPON port, FSAN G.984.2 standard, class B+
	Downstream data rate: 2.488 Gbps
	Upstream data rate: 1.244 Gbps
	SC/PC single mode fiber
	28 dB link loss and 30 km distance with 1:128
Ethernet Port (LAN)	1 × 10/100/1000M auto-negotiation RJ45 ports
	Full duplex / half-duplex
	RJ45, auto-MDI/MDI-X (transmission distance 100 m)
PON Optical Parameters	
Wavelength	Tx 1310 nm, Rx1490 nm
Tx Optical Power	0 to 5 dBm
Rx Sensitivity	-27 dBm
Saturation Optical Power	-8 dBm
Connector Type	SC
Optical Fiber	9/125 µm single-mode fiber
Data Transmission Parameters	
PON Throughput	Downstream: 2.488 Gbit/s
	Upstream: 1.244 Gbit/s
Ethernet	1000 Mbps
Packet Loss Ratio	<1*10E-12
Latency	<1.5 ms
Business Capability	Layer 2 wire speed switching
	Supports VLAN TAG/UNTAG, VLAN conversion
	Supports port-based speed limitation
	Supports priority classification
	Supports broadcast storm control
	Supports loop detection
Management	
Network Management	Supports IEEE802.3 QAM, ONU can be remotely managed by OLT
	Standard compliant OMCI interface as defined by ITU-T G.984.4
	Supports WEB management
Management Function	Status monitor, configuration management, alarm management, log management
Environmental Specifications	
Shell	Plastic casing
Power Supply	12 V DC / 0.5 A power supply adapter
Power Consumption	<4 W
Dimensions (L × W × H)	135 mm × 90 mm × 30mm
Weight	0.2 kg
Operating Temperature	0 °C to +50 °C
Storage Temperature	-40 °C to +85 °C
Operating Humidity	10 % to 90 % RH (non-condensing)
Storage Humidity	10 % to 90 % RH (non-condensing)

WIFI Specifications

Operating Mode	Router or bridge
Throughput	IEEE 802.11b: 11Mbps
	IEEE 802.11g: 54 Mbps
	IEEE 802.11n: 300 Mbps
Frequency	2.412 GHz to 2.472 GHz
Channels	13 × channels, configurable to meet the standards of USA, Canada, Japan, and China
Modulation	DSSS , CCK and OFDM
Coding	BPSK, QPSK, 16QAM and 64QAM
RF Receiver Sensitivity	
802.11b	-83 dBm @ 1 Mbps; -80 dBm @ 2 Mbps
	-79 dBm @ 5.5 Mbps; -76 dBm @ 11 Mbps
802.11g	-85 dBm @ 6 Mbps; -84 dBm @ 9 Mbps
	-82 dBm @ 12 Mbps; -80 dBm @ 18 Mbps
	-77 dBm @ 24 Mbps; -73 dBm @ 36 Mbps
	-69 dBm @ 48 Mbps; -68 dBm @ 54 Mbps
802.11n 20MHz	-74 dBm @ 65 Mbps
	-70 dBm @ 130 Mbps
802.11n 40MHz	-70 dBm @ 135 Mbps
	-67 dBm @ 300 Mbps
RF Output Level	
802.11b	17 dBm ± 0.5 dBm @ 11 Mbps
802.11g	15 dBm ± 0.5 dBm @ 54 Mbps
	16 dBm ± 0.5 dBm @ 48 Mbps
	17 dBm ± 1 dBm @ 6 Mbsp to 36 Mbps
802.11n 20 MHz	14 dBm ± 0.5 dBm @ 130 Mbps
	15 dBm ± 0.5 dBm @ 78 Mbps
	18 dBm ± 0.5 dBm @ 6.5 Mbps
802.11n 40 MHz	14 dBm ± 0.5 dBm @ 300 Mbps
	15 dBm ± 0.5 dBm @ 162 Mbps
	18 dBm ± 0.5 dBm @ 13.5 Mbps
Encryption Mode	802.11i security: WEP-64/128, TKIP (WPA-PSK) and AES (WPA2-PSK)

Ordering Information

Item	Description
AP201CW-GE-00-N-S-2	AP200CW GPON ONT 1x GE (1.25G US, 2.5G DS), 4xGE, WIFI b/g/n, Single Fiber, SC/PC, external power supply adapter

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Specifications and product availability are subject to change without notice.

Ver. ACT_AP201CW_Datasheet_V1c_May_2016