

GP1705-2G Series

xPON Multi-service
Broadband Access Home
Gateway Unit(HGU)



Product Overview

BDCOM GP1705-2G Series is a smart HGU with integrated wireless, VoIP and CATV function.

BDCOM GP1705-2G Series is oriented for the integrated multi-service network in telecom operator network.

BDCOM GP1705-2G series is compatible with EPON and GPON networks: complied with the international standard ITU-T G.984/988 and IEEE802.3ah, PRC Communication Industry Standard GB/T33845-2017 and YD/T 1475-2006, and China Telecom EPON/GPON Technical Requirement CTC.

GP1705-2G Series includes 3 models:
GP1705-2G
GP1705-2GV
GP1705-2GC

Product Characteristics

Excellent Access Capacity

GPON: supports the PON transmission rate of downlink 2.5Gbps/ uplink 1.25Gbps. Connected with OLTs, it can realize 1:128 splitting ratio. The covering radius of the network can reach to 20km.

EPON: supports the PON transmission rate of downlink 1.25Gbps/ uplink 1.25Gbps. Connected with OLTs, it can realize 1:64 splitting ratio. The covering radius of the network can reach to 20km.

Secure Service Carrying Ability

For ensuring the secure service carrying ability of ONU, BDCOM has developed techniques including VLAN, STP, port isolation, ACL, QoS and Broadcast Storm Control.

Complete Interaction Capacity

BDCOM GP1705-2G series is complied with the international standard ITU-T G.984/988 and IEEE802.3ah, PRC Communication Industry Standard GB/T33845-2017 and YD/T 1475-2006, and China Telecom EPON/GPON Technical Requirement CTC. With great interoperability and operability, BDCOM GP1705-2G series can interconnect well with OLT devices of mainstream manufacturers in the industry to minimize network construction costs. Automatic network switching enables smooth transition from EPON to GPON network.



GPON and EPON
autoadaptive



Efficient bandwidth
usage and Ethernet
services



The Splitting ratio
ups to 1:128

Product Characteristics

Advanced Energy-saving Technique

For ensuring the secure service carrying ability of ONU, BDCOM has developed techniques including VLAN, port isolation, ACL, QoS and Broadcast Storm Control.

Rich OMCI&OAM Function

BDCOM GP1705-2G series supports the standard OMCI defined by ITU-T, standard OAM and extended OAM defined by telecom CTC2.1/3.0, including configuration, alarm, performance monitoring, fault isolation and security management, and it also supports private OMCI and OAM defined by BDCOM.

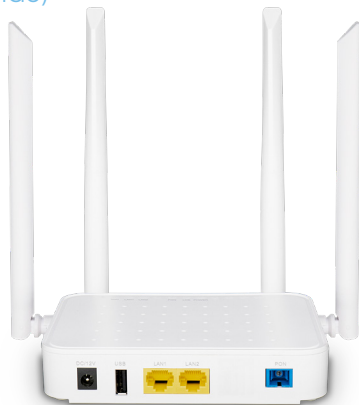
High Service Control Capability

BDCOM GP1705-2G series supports DBA and Rate-Limit. BDCOM GP1705-2G series also supports advanced dynamic bandwidth distribution and accurate bandwidth limit, which enables users to share 2.5Gbps (GPON) and 1.25Gbps (EPON) bandwidth resource appropriately. In addition, the QOS function of BDCOM GP1705-2G series guarantees a reliable service quality and service priority. bandwidth resource appropriately. It also supports QOS function, which guarantees a reliable service quality and service priority.

Model Lists

GP1705-2G

xPON WiFi5 Home Gateway Unit (HGU)



- 1 SC/UPC
- 2 GE TX
- 1 USB port
- 1200Mbps wireless

GP1705-2GV

xPON WiFi5 Voice Home Gateway Unit(HGU)



- 1 SC/UPC
- 2 GE TX
- 1 USB port
- 1 POTS
- 1200Mbps wireless

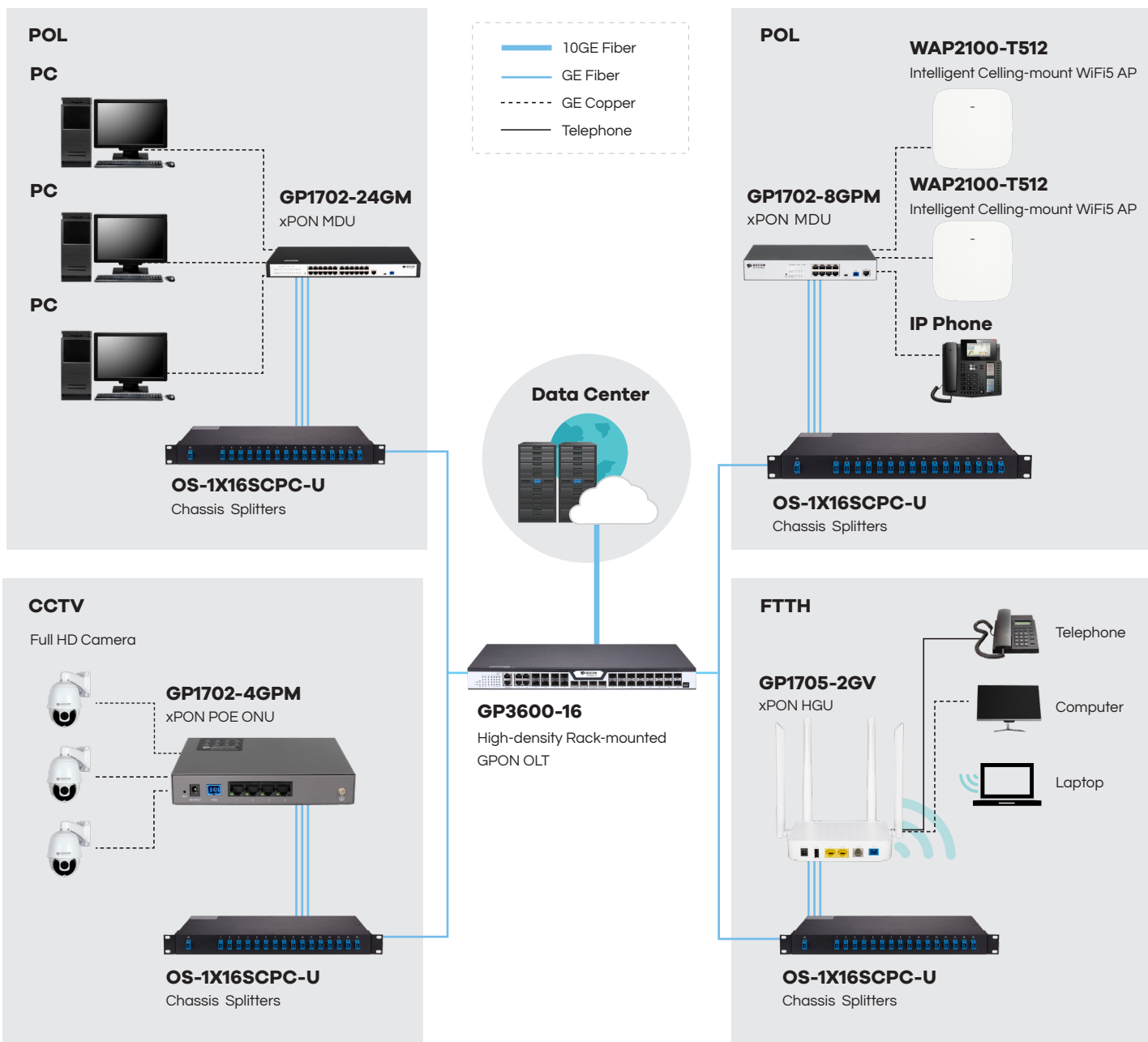
GP1705-2GC

xPON WiFi5 CATV Home Gateway Unit(HGU)



- 1 SC/APC
- 2 GE TX
- 1 RF port(British System)
- 1200Mbps wireless

Application Diagram



System Performance

Item		GP1705-2G	GP1705-2GV	GP1705-2GC
Service interface				
PON ports		1 SC/UPC	1 SC/UPC	1 SC/APC
UNI ports		2 GE TX	2 GE TX	2 GE TX
WIFI		1200Mbps	1200Mbps	1200Mbps
Service ports		/	1 POTS	1 RF
USB		1	1	/
Optical power	TX power	0.5~5dBm	0.5~5dBm	0.5~5dBm
	RX sensitive	<-28dBm	<-28dBm	<-28dBm
Power supply				
AC adaptor		Input: 100-240V AC Output: 12V/1A	Input: 100-240V AC Output: 12V/1.5A	Input: 100-240V AC Output: 12V/1.5A
Max. consumption (W)		10	15	15
Appearance				
Chassis	Dimensions (WxDxH mm)	140 x 105 x 30	140 x 105 x 30	140 x 105 x 30
	Weight(Kg)(empty)	0.3	0.3	0.3
Environmental Specifications				
Operating	Temperature	-0°C -45°C	-0°C -45°C	-0°C -45°C
	Humidity	10%~85% (non-condensing)	10%~85% (non-condensing)	10%~85% (non-condensing)
Storage	Temperature	-40°C -85°C	-40°C -85°C	-40°C -85°C
	Humidity	5%~95% (non-condensing)	5%~95% (non-condensing)	5%~95% (non-condensing)
System capacity				
Accessories			Power adaptor	

Technical Specifications

Standards

- ITU-T G.984/G.988
- IEEE802.3ah
- GBT33845-2017, YD/T 1475-2006
- IEEE 802.1Q, VLAN
- ITU-T Y.1291

VLAN

- 4K VLAN
- Port based VLAN
- IEEE 802.1Q VLAN
- Tag/Transparent/Aggregation /Trunk/Translation mode VLAN
- CTC2.0 defined VLAN

IP Service

- DHCP server/client
- Routing/Bridging/Hybrid mode
- DNS, DDNS
- PPPOE
- NAT/NAPT

xPON Service

- AES128 algorithm encryption
- MAC/Loid/Hybrid authentication

QoS

- Backpressure flow control (half-duplex)
- IEEE 802.3x flow control (full duplex)
- Against Head of Line mechanism
- IEEE 802.1p, CoS
- Four priority queues on each port
- WR, SP and FIFO queue schedule algorithms
- Port rate limit
- SLA and DBA

Reliability

- Management modes including CLI, HTTP, SNMP, TR069 and TELNET
- Software upgrade through TFTP and WEB, OMCI, etc.
- Local or server syslog

Voice Service

- SIP, T.38 FAX
- Three-way calling
- Call waiting
- Hot-line calling

Network Security

- MAC address number limit
- MAC filter
- Port protect

Multicast

- IGMP-Snooping
- CTC defined dynamic multicast function
- MLD-Snooping
- Multicast group limitation
- Multicast fast-leave

Reliability

- Loop detection
- Dying-Gasp
- TX/RX optical power alarm

Wireless

- 802.11a/b/g/n/ac
- 2x2 MIMO
- Multi SSID
- SSID encryption
- Wireless channel (configurable)

Ordering Information

Model	Description
GP1705-2G	xPON WiFi5 ONU, 1-Port GPON/EPON (SC/UPC), 2-Port Gigabit RJ45, dual band 1200M WiFi5, 4 external antennas, plastic casing, DC12V/1.5A power adaptor
GP1705-2GV	xPON Voice WiFi5 ONU, 1-Port GPON/EPON (SC/UPC), 2-Port Gigabit RJ45 + 1-Port RJ11 (POTS), dual band 1200M WiFi5, 4 external antennas, plastic casing, DC12V/1.5A power adaptor
GP1705-2GC	xPON CATV WiFi5 ONU, 1-Port GPON/EPON (SC/APC), 2-Port Gigabit RJ45 + 1-Port RF, dual band 1200M WiFi5, 4 external antennas, plastic casing, DC12V/1.5A power adaptor