GP1705-2G

xPON FTTH Home Gateway Unit(HGU)



Overview

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

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

BDCOM GP1705-2G 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.

Highlights

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 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 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.

High Service Control Capability

BDCOM GP1705-2G supports DBA and Rate-Limit. BDCOM GP1705-2G 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 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.

Rich OMCI&OAM Function

BDCOM GP1705-2G 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.

Model Lists

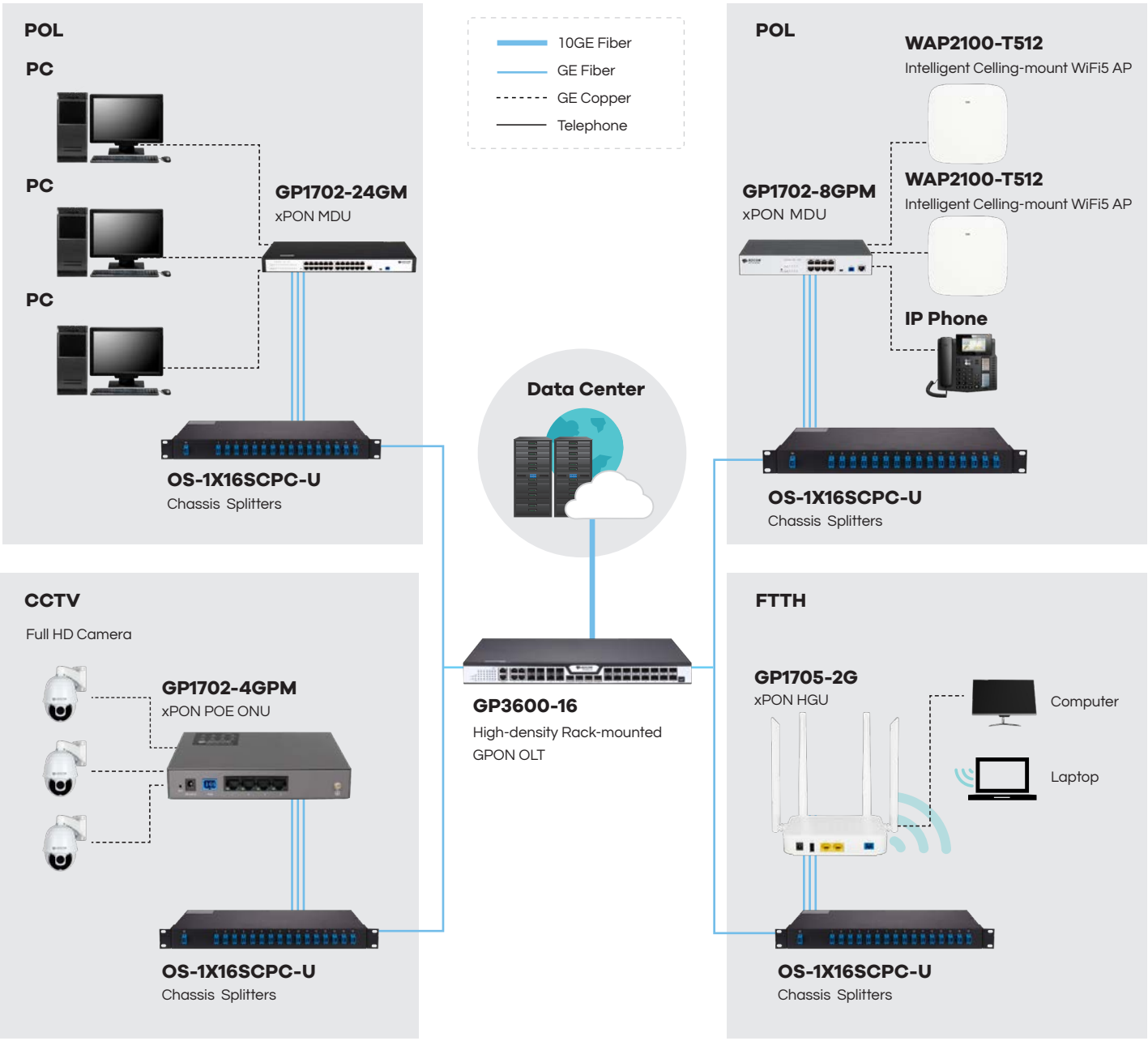
GP1705-2G

xPON Home Gateway Unit(HGU)



· 1-Port SC/UPC
· 2-Port Gigabit RJ45
· 1-Port USB2.0
· 1200Mbps wireless

Application Diagram



System Performance

Item			GP1705-2G
Service interface			
PON ports			1-Port SC/UPC 2-Port Gigabit RJ45
UNI ports			2 GE TX
WIFI			1200Mbps
USB			1
Optical power		TX power	0.5~5dBm
		RX sensitive	<-28dBm
Power supply			
AC adaptor			Input: 100-240V AC Output: 12V/1A
Max. consumption (W)			10
Appearance			
Chassis		Dimensions (WxDxH mm)	140 x 105 x 30
		Weight(Kg)(empty)	0.3
Environmental Specifications			
Operating		Temperature	-0℃ -45℃
		Humidity	10%~85% (non-condensing)
Storage		Temperature	-40℃ -85℃
		Humidity	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

Management

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

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

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

Ordering Information

Model	Description
GP1705-2G	xPON WiFi ONU, 1-Port GPON/EPON (SC/UPC), 2-Port Gigabit RJ45, dual band 1200M WiFi, 4 external antennas, plastic casing, DC12V/1.5A power adaptor

Copyright © Shanghai Baud Data Communication Co., LTD.2023. All Rights Reserved.

This document is BDCOM Public Information. BDCOM reserves the right to alter, update and otherwise change the information contained in the document from time to time.

BDCOM