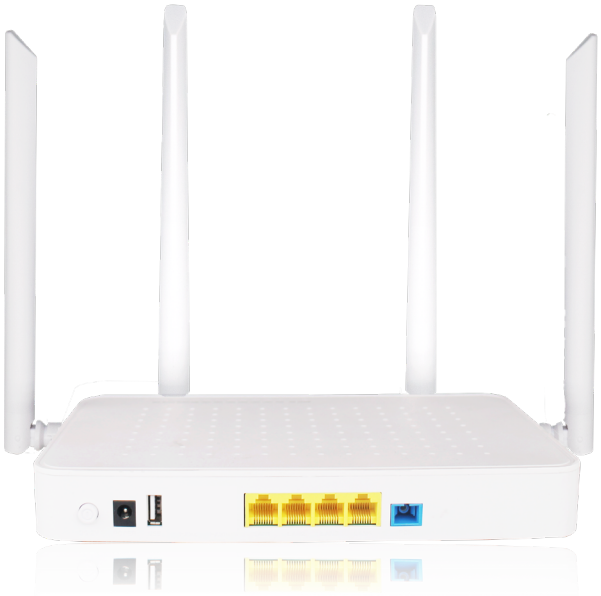
GP1704 Series

XPON FTTH Home Gateway Unit(HGU)



Overview

BDCOM GP1704 Series is a smart HGU with integrated wireless, VoIP and CATV function.
BDCOM GP1704 Series is orientedfor the integrated multi-service network in telecom operatornetwork.

BDCOM GP1704 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.

GP1704 FTTH Series includes 3 models:
GP1704-2F-E,
GP1704-2G-22A, GP1704-4G-22A,

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.

Advanced Energy-saving Technique

BDCOM GP1704 series supports the industry-leading “GreenTouch” architecture and “Smart@CHIP” technology to ensure energy saving and environmental protection.

- GPON and EPON auto-adaptive
- Efficient bandwidth usage and Ethernet services
- The Splitting ratio ups to 1:128

High Service Control Capability

BDCOM GP1704 series supports DBA and Rate-Limit. BDCOM GP1704 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. BDCOM GP1704 series supports DBA and Rate-Limit. BDCOM GP1704 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.

Rich OMCI Function

BDCOM GP1704 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.

Complete Interaction Capacity

BDCOM GP1704 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 GP1704 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.

Model Lists

GP1704-2F-E

xPON HGU

· 1-Port SC/UPC
· 1-Port Gigabit RJ45
· 1-Port 100M RJ45
· 1-Port USB2.0
· 300Mbps wireless

GP1704-2G-22A

xPON HGU

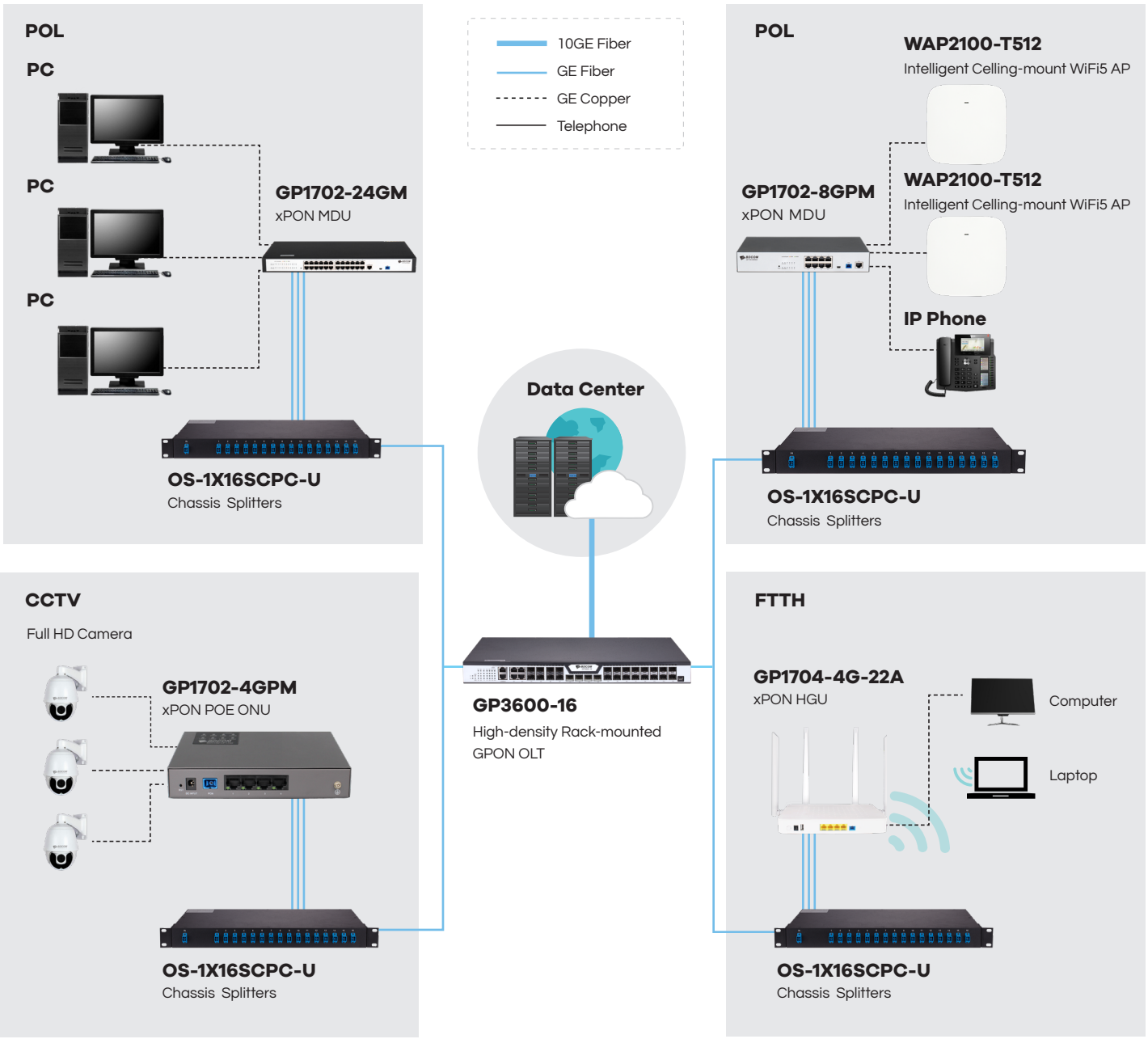
· 1-Port SC/UPC
· 2-Port Gigabit RJ45
· 1-Port USB2.0
· 1200Mbps wireless

GP1704-4G-22A

xPON HGU

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

Application Diagram



System Performance

Item		GP1704-2F-E	GP1704-2G-22A	GP1704-4G-22A
Service interface				
PON ports		1 SC/UPC	1 SC/UPC	1 SC/APC
UNI ports		1-Port Gigabit RJ45 1-Port 100M RJ45	2-Port Gigabit RJ45	4-Port Gigabit RJ45
WIFI		300Mbps	1200Mbps	1200Mbps
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	230 x 140 x 34.9	230 x 140 x 34.9
	Weight(Kg)(empty)	0.2	0.4	0.4
Package	Dimensions (WxDxH mm)	277 x 176 x 38	325 x 255 x 48	325 x 255 x 48
	Weight (Kg)	0.3	0.7	0.7
Environmental Specifications				
Operating	Temperature Humidity		-0℃ -45℃ 10%~85% (non-condensing)	
Storage	Temperature Humidity		-40℃ -85℃ 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
- CTC2.0 defined VLAN

IP Service

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

GPON 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

- 802.11 b/g/n
- 802.11 ac(-22A models)
- 2x2 MIMO
- Multi SSID
- SSID encryption
- Wireless channel (configurable)

Ordering Information

Model	Description
GP1704-2F-E	xPON WiFi ONU, 1-Port GPON/EPON (SC/UPC), 1-Port Gigabit RJ45 + 1-Port 100M RJ45, single band 300M WiFi, plastic casing, DC12V/1A power adaptor
GP1704-2G-22A	xPON WiFi ONU, 1-Port GPON/EPON (SC/UPC), 2-Port Gigabit RJ45, dual band 1200M WiFi, 2 external antennas, plastic casing, DC12V/1.5A power adaptor
GP1704-4G-22A	xPON WiFi ONU, 1-Port GPON/EPON (SC/UPC), 4-Port Gigabit RJ45, dual band 1200M WiFi, 4 external antennas, plastic casing, DC12V/1.5A power adaptor

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