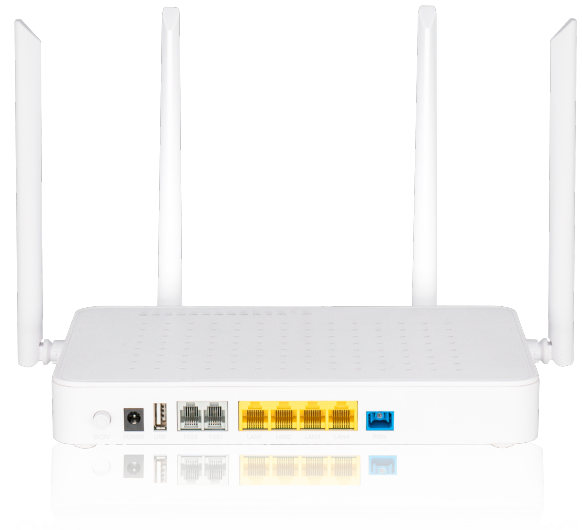


GP1704 Series

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



Product Overview

BDCOM GP1704 Series is a smart HGU with integrated wireless, VoIP and CATV function.

BDCOM GP1704 Series is oriented for the integrated multi-service network in telecom operator network.

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 Series includes 9 models: GP1704-2FC-S, GP1704-2F-E, GP1704-2F-V, GP1704-4F-E, GP1704-4GV, GP1704-4GV-22A, GP1704-4GVC-22A, GP1704-4G-22A, GP1704-4GC-22A.

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.

Advanced Energy-saving Technique

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



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

GP1704-2FC-S

xPON HGU



- 1 SC/APC
- 1 GE + 1 FE TX
- 1 RF port
- 300Mbps wireless

GP1704-2F-E

xPON HGU



- 1 SC/UPC
- 1 GE + 1 FE TX
- 1 USB port
- 300Mbps wireless

GP1704-2FV

xPON HGU



- 1 SC/UPC
- 1 GE + 1 FE TX
- 1 USB port
- 1 POTS
- 300Mbps Wireless

GP1704-4F-E

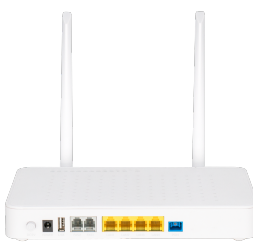
xPON HGU



- 1 SC/UPC
- 1 GE + 3 FE TX
- 300Mbps Wireless

GP1704-4GV

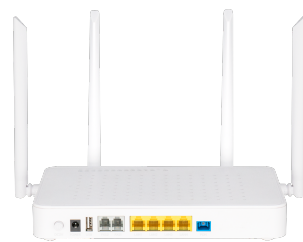
xPON HGU



- 1 SC/UPC
- 4 GE TX
- 1 USB port
- 2 POTS
- 300Mbps wireless

GP1704-4GV-22A

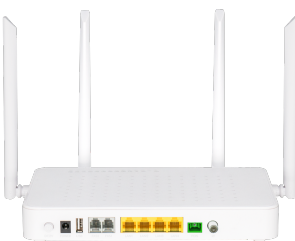
xPON HGU



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

GP1704-4GVC-22A

xPON HGU



- 1 SC/APC
- 4 GE TX
- 1 USB port
- 1 RF port
- 2 POTS
- 1200Mbps wireless

GP1704-4G-22A

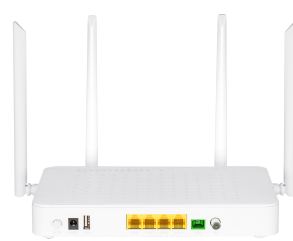
xPON HGU



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

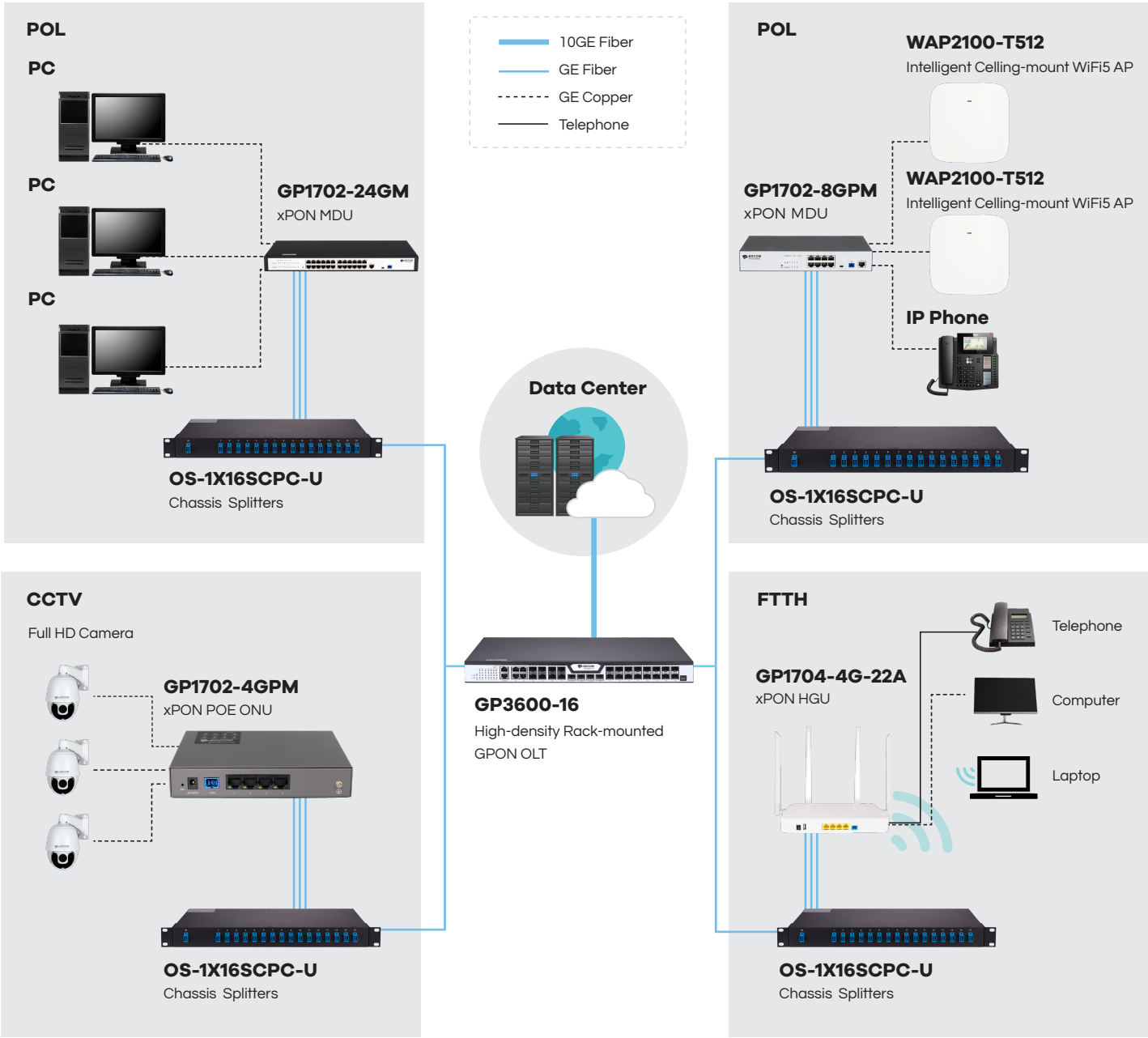
GP1704-4GC-22A

xPON HGU



- 1 SC/APC
- 4 GE TX
- 1 USB port
- 1 RF port
- 1200Mbps wireless

Application Diagram



System Performance

Item		GP1704-2FC-S	GP1704-2F-E	GP1704-2FV	GP1704-4F-E	GP1704-4GV
Service interface						
PON ports		1 SC/APC	1 SC/UPC	1 SC/UPC	1 SC/UPC	1 SC/UPC
UNI ports		1 GE + 1 FE TX + 1 RF	1 GE + 1 FE TX	1 GE + 1 FE TX	1 GE +3 FE TX	4 GE TX
WIFI		300Mbps	300Mbps	300Mbps	300Mbps	300Mbps
Voice		/	/	/	/	/
USB		/	/	/	/	/
Optical power	TX power	0.5~5dBm	0.5~5dBm	0.5~5dBm	0.5~5dBm	0.5~5dBm
	RX sensitive	<-28dBm	<-28dBm	<-28dBm	<-28dBm	<-28dBm
Power supply						
AC adaptor		Input: 100-240V AC Output: 12V/1A	Input: 100-240V AC Output: 12V/1A	Input: 100-240V AC Output: 12V/1A	Input: 100-240V AC Output: 12V/1A	Input: 100-240V AC Output: 12V/1.5A
Max. consumption (W)		10	10	10	8	15
Appearance						
Chassis	Dimensions (WxDxH mm)	140 x 105 x 30	140 x 105 x 30	140 x 105 x 30	140 x 105 x 30	230 x 140 x 34.9
	Weight(Kg)(empty)	0.2	0.2	0.2	0.2	0.4
Package	Dimensions (WxDxH mm)	277 x 176 x 38	277 x 176 x 38	277 x 176 x 38	277 x 176 x 38	325 x 255 x 48
	Weight (Kg)	0.3	0.3	0.3	0.4	0.7
Item		GP1704-4GV-22A	GP1704-4GVC-22A	GP1704-4G-22A	GP1704-4GC-22A	
Service interface						
PON ports		1 SC/UPC	1 SC/APC	1 SC/UPC	1 SC/APC	
UNI ports		4 GE TX	4 GE TX	4 GE TX	4 GE TX + 1 RF	
WIFI		300Mbps	1200Mbps	1200Mbps	1200Mbps	
Voice		2	2	/	/	
USB		1	1	1	1	
Optical power	TX power	0.5~5dBm	0.5~5dBm	0.5~5dBm	0.5~5dBm	
	RX sensitive	<-28dBm	<-28dBm	<-28dBm	<-28dBm	
Power supply						
AC adaptor		Input: 100-240V AC Output: 12V/1.5A	Input: 100-240V AC Output: 12V/1.5A	Input: 100-240V AC Output: 12V/1.5A	Input: 100-240V AC Output: 12V/1.5A	
Max. consumption (W)		15	15	15	15	
Appearance						
Chassis	Dimensions (WxDxH mm)	230 x 140 x 34.9	230 x 140 x 34.9	230 x 140 x 34.9	230 x 140 x 34.9	
	Weight(Kg)(empty)	0.4	0.5	0.4	0.4	
Package	Dimensions (WxDxH mm)	325 x 255 x 48	325 x 255 x 48	325 x 255 x 48	325 x 255 x 48	
	Weight (Kg)	0.6	0.7	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

Reliability

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

GPON Service

- AES128 algorithm encryption
- MAC/Loid/Hybrid authentication

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

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

Ordering Information

Model	Description
GP1704-2FC-S	FTTH/O ONU, 1 GPON port (SC/APC), 1 GE + 1 FE TX ports, 1 RF(British system), external dual antenna(300M WiFi), plastic hull, DC12V/1A, external adaptor
GP1704-2F-E	FTTH/O ONU, 1 GPON port (SC/UPC), 1 GE + 1 FE TX ports, 1 USB port, external dual antenna(300M WiFi), plastic hull, DC12V/1A, external adaptor
GP1704-2FV	FTTH/O ONU, 1 GPON port (SC/UPC), 1 GE + 1 FE TX ports, 1 POTS, 1 USB port, external dual antenna(300M WiFi), plastic hull, DC12V/1A, external adaptor
GP1704-4F-E	FTTH/O ONU, 1 GPON port (SC/UPC), 1 GE + 3 FE TX ports, external dual antenna(300M WiFi), plastic hull, DC12V/1A, external adaptor
GP1704-4GV	FTTH/O ONU, 1 GPON port (SC/UPC), 4 GE TX ports, 2 POTS, 1 USB, external dual antenna(300M WiFi), plastic hull, DC12V/1.5A, external adaptor
GP1704-4GV-22A	FTTH/O ONU, 1 GPON port (SC/UPC), 4 GE TX ports, 2 POTS, 1 USB, external quadruple antenna(1200M WiFi), plastic hull, DC12V/1.5A, external adaptor
GP1704-4GVC-22A	FTTH/O ONU, 1 GPON port (SC/APC), 4 GE TX ports, 2 POTS, 1 USB, 1 RF(British system), external quadruple antenna(1200M WiFi), plastic hull, DC12V/1.5A, external adaptor
GP1704-4G-22A	FTTH/O ONU, 1 GPON port (SC/UPC), 4 GE TX ports, 1 USB, external quadruple antenna(1200M WiFi), plastic hull, DC12V/1.5A, external adaptor
GP1704-4GC-22A	FTTH/O ONU, 1 GPON port (SC/APC), 4 GE TX ports, 1 USB, 1 RF(British system), external quadruple antenna(1200M WiFi), plastic hull, DC12V/1.5A, external adaptor