GP1702-1G

XPON Desktop Data ONT

Overview

BDCOM GP1702-1G is a new generation smart ONT for integrated multi-service broadband access networks.

GP1702-1G, involving multiple models, supports common enterprise broadband access service, POE service and outdoor wide-temperature.

BDCOM GP1702-1G 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/T1475-2006, and China Telecom EPON/GPON Technical Requirement CTC. Standing out with great interoperability and operability, BDCOM GP1702-1G can Interconnect well with OLTs of mainstream manufacturers in the industry.

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 GP1702-1G 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 GP1702-1G 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 auto-adaptive
- Efficient bandwidth usage and Ethernet services
- The Splitting ratio ups to 1:128

Product Characteristics

Advanced Energy-saving Technique

GP1702-1G supports the “GreenTouch” architecture and “Smart@CHIP”.

High Service Control Capability

BDCOM GP1702-1G supports DBA and Rate-Limit. BDCOM GP1702-1G 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 GP1702-1G 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 GP1702-1G 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.

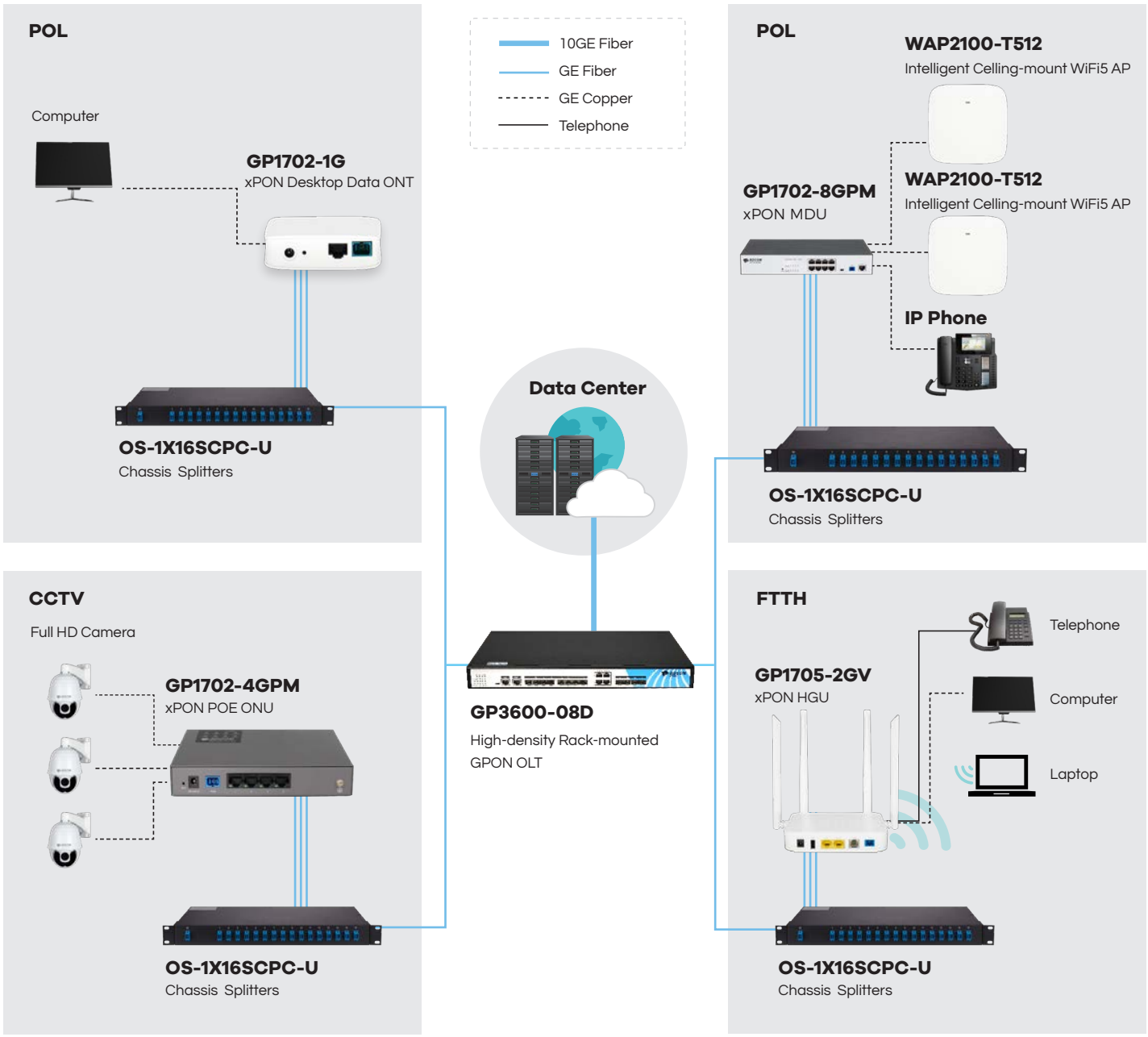
Model Lists

GP1702-1G

XPON Desktop Data ONT

· 1-Port SC/UPC
· 1-Port Gigabit RJ45

Application Diagram



System Performance

Item		GP1702-1G
Service interface		
PON ports		1-Port SC/UPC
UNI ports		1-Port Gigabit RJ45
Optical power	TX power	0.5~5dBm
	RX sensitive	-28dBm
Power supply		
AC adaptor	Input:	100-240V AC
	Output:	12V/0.5A
Max. consumption (W)		6
Appearance		
Chassis	Dimensions (WxDxH mm)	80 x 75 x 24
	Weight (Kg) (empty)	0.1
Package	Dimensions (WxDxH mm)	181x93x36
	Weight (Kg)	0.2
Environmental specifications		
Operating	Temperature	0~45°C
	Humidity	10%~85%(non-condensing)
Storage	Temperature	-40°C~85°C
	Humidity	5%~95%(non-condensing)
Accessories		
Parts		Power adaptor

Technical Specifications

Standards

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

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 and TELNET
- Software upgrade through TFTP and WEB, OMCI, OAM,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

Ordering Information

Model	Description
GP1702-1G	xPON ONU, 1-Port GPON/EPON (SC/UPC), 1-Port Gigabit RJ45, plastic casing, DC12V/0.5A power adaptor

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