

GPON Multi-service Broadband Access ONT

GP1702 Series

Product Overview

BDCOM GP1702 Series is a new generation smart ONT for integrated multi-service broadband access networks. GP1702 Series, involving multiple models, supports common enterprise broadband access service, POE service and outdoor wide-temperature.

GP1702 Series is complied with the international standard ITU-T G.984/988 and PRC Communication Industry Standard GPON ONT in Access Technology Requirements and China Telecom GPON Technical Requirement CTC2.0.

GP1702 Series has 7 models:

GP1702-1G, GP1702-2FC-S, GP1702-4F, GP1702-4FC-S, GP1702-4G, GP1702-4G-POE and GP1702-4G-IE.

Product Characteristics

Excellent Access Capacity

GP1702 Series supports the PON transmission rate of downlink 2.5Gbps/ uplink 1.25Gbps. Connected with BDCOM OLT, it can realize 1:128 splitting ratio. The covering radius of the network can reach to 20km.

Secure Service Carrying Ability

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



High Service Control Capability

GP1702 Series supports DBA and Rate-Limit. It supports advanced dynamic bandwidth distribution and accurate bandwidth limit, which enables users to share 2.5Gbps bandwidth resource appropriately. It also supports QOS function, which guarantees a reliable service quality and service priority.

Rich OMCI Function

GP1702 Series supports the standard OMCI defined by ITU-T, including configuration, alarm, performance monitoring, fault isolation and security management, and it also supports private OMCI defined by BDCOM.

Complete Interaction Capacity

GP1702 Series is complied with ITU-T G.984/988 and relevant requirements for PRC Community Industry Standard GPON ONT in Access Technology Requirements and China Telecom GPON Technical Requirement CTC2.0.

Advanced Energy-saving Technique

GP1702 Series supports the "GreenTouch" architecture and "Smart@CHIP".

Varied Application Scenarios

POE model GP1702-4G-POE can support 802.af/at, working temperature of GP1702-4G-IE can reach up to 70 °C



Support 1.25Gbps uplink and 2.5Gbps downlink bandwidth



Efficient bandwidth usage and Ethernet services

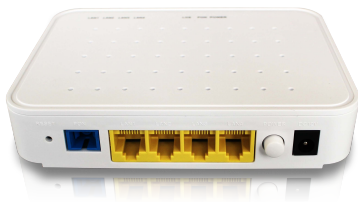


The splitting ratio ups to 1:128

Model Lists

GP1702-4F

GPON Multi-service Broadband Access ONT



- 1 SC/UPC
- 1 GE + 3 FE TX

GP1702-4FC-S

GPON Multi-service Broadband Access ONT



- 1 SC/APC
- 1 GE + 3 FE TX
- 1 RF port

GP1702-4G

GPON Multi-service Broadband Access ONT



- 1 SC/UPC
- 4 GE TX

GP1702-4G-POE

GPON Multi-service Broadband Access ONT



- 1 SC/UPC
- 4 GE POE

GP1702-4G-IE

GPON Multi-service Broadband Access ONT



- 1 SC/UPC
- 4 GE TX

GP1702-1G

GPON Multi-service Broadband Access ONT



- 1 SC/UPC
- 1 GE TX

GP1702-2FC-S

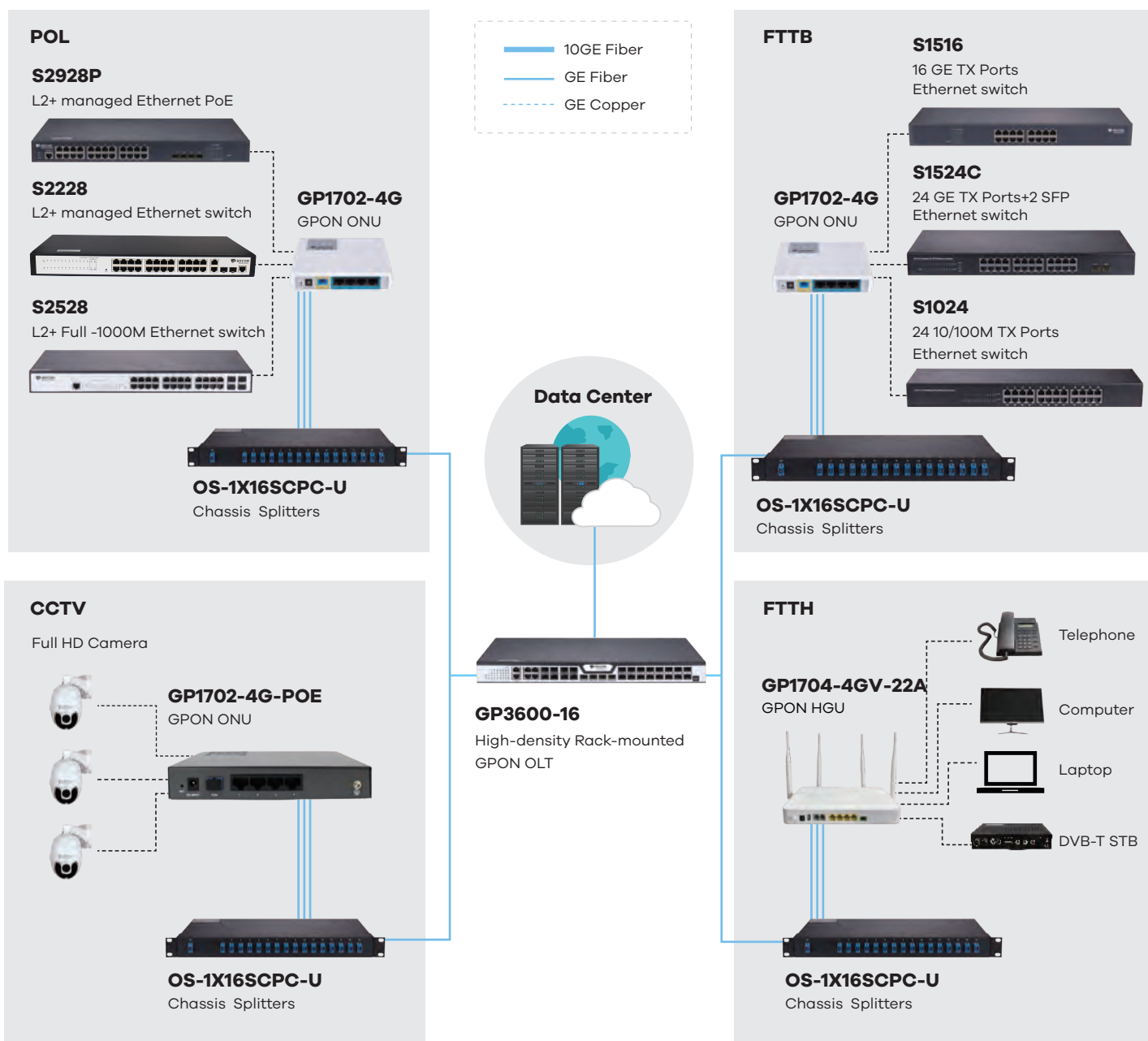
GPON Multi-service Broadband Access ONT



- 1 SC/APC
- 1 GE + 1 FE TX
- RF port

BDCOM GP1702 Series

Application Diagram



System Performance

Item		GP1702-1G	GP1702-2FC-S	GP1702-4F	GP1702-4FC-S	GP1702-4G	GP1702-4G-POE	GP1702-4G-IE
Service interface								
PON ports		1 SC/UPC	1 SC/APC	1 SC/UPC	1 SC/APC	1 SC/UPC	1 SC/UPC	1 SC/UPC
UNI ports		1 GE	1GE + 1FE 1 RF	1 GE + 3 FE	1 GE + 3 FE 1 RF	4 GE	4 GE POE	4 GE
Optical power	TX power				0.5~5dBm			
	RX sensitive				<-28dBm			
Power supply								
AC adaptor	Input:	100-240V AC	100-240V AC	100-240V AC	100-240V AC	100-240V AC	100-240V AC	100-240V AC
	Output:	12V/0.5A	12V/1A	12V/0.5A	12V/1A	12V/0.5A	DC53.5V/1.2A	
Max. consumption (W)		6	10	6	10	6	65(with POE)	6
Appearance								
Chassis	Dimensions (WxDxH mm)	80 x 75 x 24	140 x 105 x 30	130 x 100 x 28	200 x 150 x 38	130 x 100 x 28	170 x 98 x 28	238 x 140 x 32
	Weight (Kg)(empty)	0.1	0.2	0.2	0.3	0.2	0.6	0.4
Package	Dimensions (WxDxH mm)	178 x 126 x 35	277 x 176 x 38	256 x 114 x 46	290 x 202 x 54	256 x 114 x 46	250 x 230 x 55	364 x 198 x 75
	Weight (Kg)	0.2	0.4	0.3	0.5	0.3	0.8	0.6
Environmental Specifications								
Operating	Temperature	0~45℃	0~45℃	0~45℃	0~45℃	0~45℃	0~45℃	-20~70℃
	Humidity	10%~85% (non-condensing)	10%~85% (non-condensing)	10%~85% (non-condensing)	10%~85% (non-condensing)	10%~85% (non-condensing)	10%~85% (non-condensing)	10%~85% (non-condensing)
Storage	Temperature	-40℃ ~85℃	-40℃ ~85℃	-40℃ ~85℃	-40℃ ~85℃	-40℃ ~85℃	-40℃ ~85℃	-40℃ ~85℃
	Humidity	5%~95% (non-condensing)	5%~95% (non-condensing)	5%~95% (non-condensing)	5%~95% (non-condensing)	5%~95% (non-condensing)	5%~95% (non-condensing)	5%~95% (non-condensing)
Accessories								
Parts		Power adaptor						

Ordering Information

Model	Description
GP1702-1G	FTTH/O ONT, 1 GPON port (SC/UPC), 1 GE TX port, supporting PPPoE, plastic hull, external adaptor
GP1702-2FC-S	FTTH/O ONT, 1 GPON port (SC/APC), 1 GE + 1 FE TX ports, 1 RF interface (British System), plastic hull, external adaptor
GP1702-4F	FTTH/O ONT, 1 GPON port (SC/UPC), 1 GE + 3 FE TX port, plastic hull, external adaptor
GP1702-4FC-S	FTTH/O ONT, 1 GPON port (SC/APC), 1 GE + 3 FE TX ports, 1 RF interface (British System), plastic hull, external adaptor
GP1702-4G	FTTH/O ONT, 1 GPON port (SC/UPC), 4 GE TX ports, plastic hull, external adaptor
GP1702-4G-POE	FTTB ONU, 1 GPON port (SC/UPC), 4 GE POE ports, iron hull, 4 POE power ports, external adaptor (Output DC53.5V/1.2A)
GP1702-4G-IE	Outdoor wide temperature ONT, 1 GPON port (SC/UPC), 4 GE TX ports, iron hull, AC220V input, -20~70°C working temperature

Technical Specifications

Standards

- ITU-T G.984/G.988
- PRC Community Industry Standard GPON ONU in Access Technology Requirements
- IEEE 802.1D, Spanning Tree
- 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

EPON 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, 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

Copyright © Shanghai Baud Data Communication Co., LTD.2020. 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.

