

# GP1702-1G

XPON Desktop Data ONT



## Overview

VIVIO 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.

VIVIO 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, VIVIO 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, VIVIO has developed techniques including VLAN, STP, port isolation, ACL, QoS and Broadcast Storm Control.

### Complete Interaction Capacity

VIVIO 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, VIVIO 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

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

VIVIO 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 VIVIO.

## Model Lists

### GP1702-1G

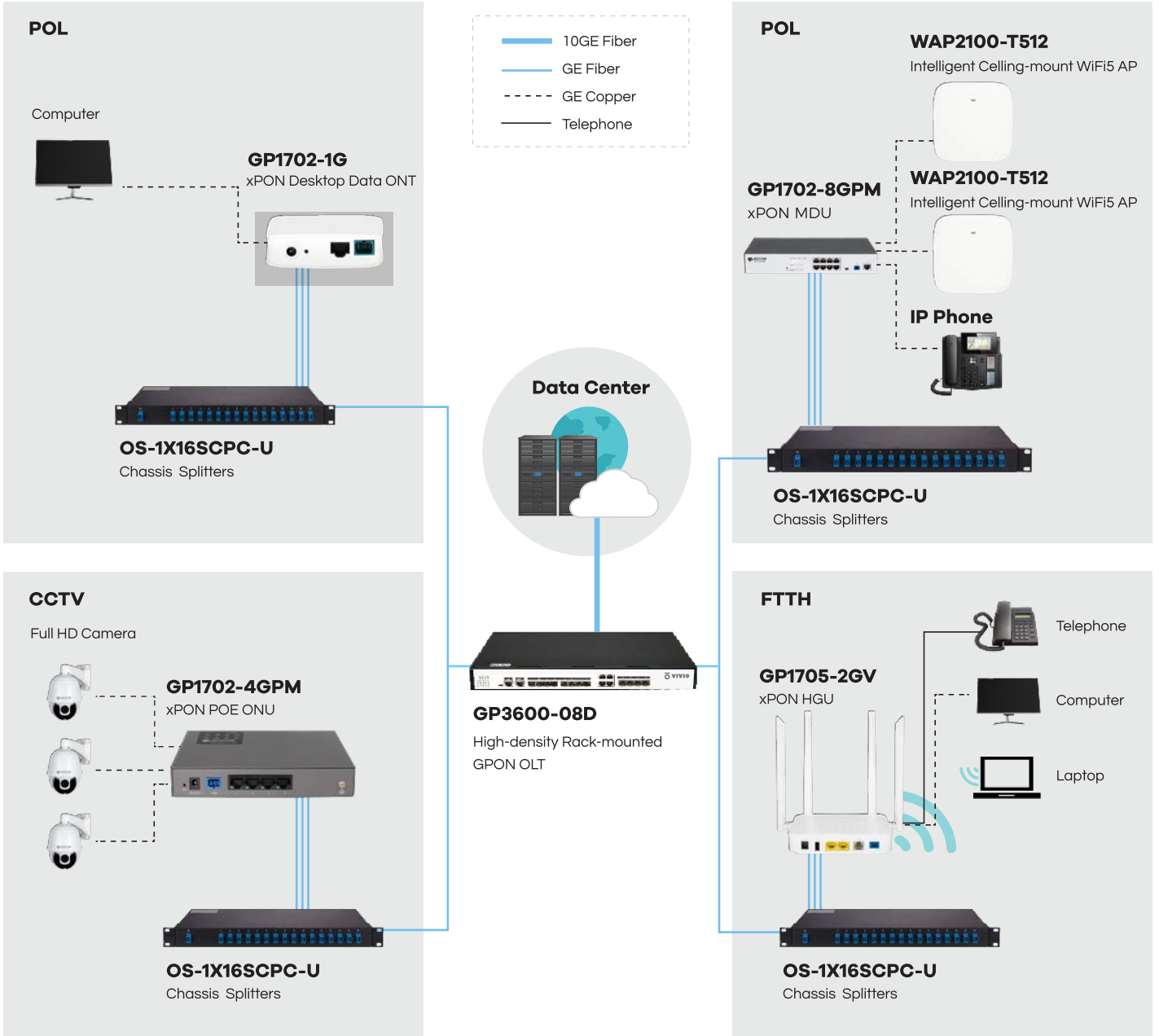
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- 1-Port SC/UPC
- 1-Port Gigabit RJ45

VIVIO GP1702-1G

# Application Diagram



## System Performance

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