

GP1702 Series

xPON MDU(Multi-Dwelling Unit)



Overview

Vivio GP1702 Series is a new generation smart MDU for integrated multi-service broadband access networks.

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

GP1702 Series includes 4 models: GP1702-4G, GP1702-4GM, GP1702-8GM, GP1702-24GM

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 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, Vivio GP1705 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.



GPON and EPON auto-adaptive



Efficient bandwidth usage and Ethernet services



The Splitting ratio ups to 1:128

Highlights

Advanced Energy-saving Technique

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

High Service Control Capability

Vivio GP1702 series supports DBA and Rate-Limit. Vivio GP1702 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. In addition, the QOS function of Vivio GP1702 series 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 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 Vivio.

Model Lists

GP1702-4G

xPON MDU(Multi-Dwelling Unit)



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

GP1702-4GM

xPON MDU(Multi-Dwelling Unit)



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

GP1702-8GM

xPON MDU(Multi-Dwelling Unit)



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

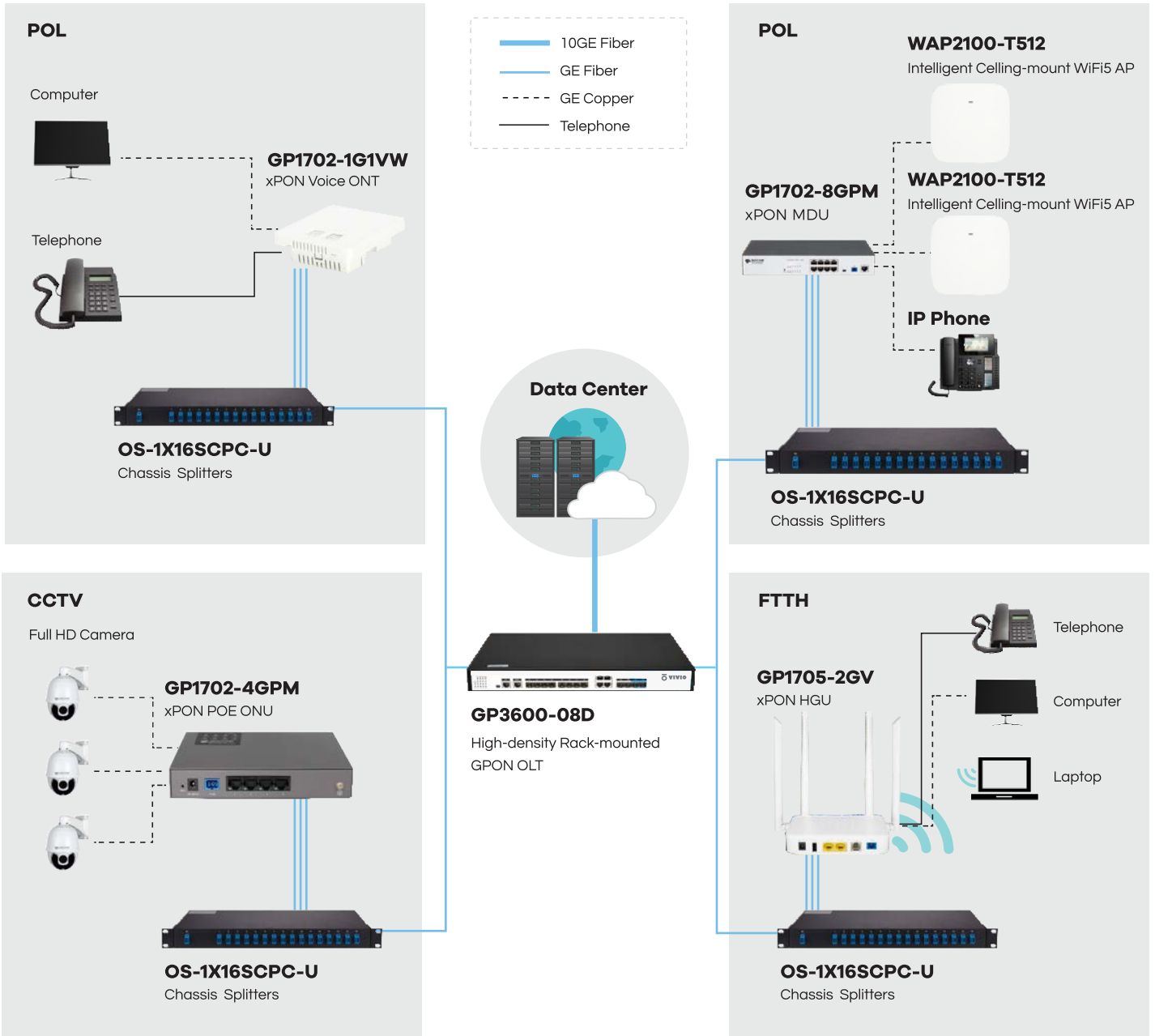
GP1702-24GM

xPON MDU(Multi-Dwelling Unit)



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

Application Diagram



System Performance

Item	GP1702-4G	GP1702-4GM	GP1702-8GM	GP1702-24GM	
Service interface					
PON ports	1-Port SC/UPC	1-Port SC/UPC	1-Port SC/UPC	1-Port SC/UPC	
UNI ports	4-Port Gigabit RJ45	4-Port Gigabit RJ45	8-Port Gigabit RJ45	24-Port Gigabit RJ45	
Optical power					
TX power	0.5~5dBm	0.5~5dBm	0.5~5dBm	0.5~5dBm	
RX sensitive	-28dBm	-28dBm	-28dBm	-28dBm	
Power supply					
Power supply	12V/1A	12V/1A	100-240V AC	100-240V AC	
Max. consumption (W)	10	10	15	25	
Appearance					
Chassis	Dimensions (WxDxH mm)	130 x 100 x 28	170 x 98 x 28	280 x 180 x 44	440 x 207 x 44
	Weight (Kg) (empty)	0.2	0.4	1.1	2.1
Package	Dimensions (WxDxH mm)	231 x 126 x 42	270 x 117 x 48	400 x 220 x 63	500 x 323 x 75
	Weight (Kg)	0.4	0.6	1.7	2.8
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/power cable				

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
GP1702-4G	xPON ONU, 1-Port GPON/EPON (SC/UPC), 4-Port Gigabit RJ45, plastic casing, DC12V/0.5A power adaptor
GP1702-4GM	xPON ONU, 1-Port GPON/EPON (SC/UPC), 4-Port Gigabit RJ45, metal casing, DC12V/0.5A power adaptor
GP1702-8GM	xPON MDU (Multi-Dwelling Unit), 1-Port GPON/EPON (SC/UPC), 8-Port Gigabit RJ45, metal casing, single AC-220V power supply
GP1702-24GM	xPON MDU(Multi-Dwelling Unit), 1-Port GPON/EPON (SC/UPC), 24-Port Gigabit RJ45, metal casing, single AC-220V power supply