

# GPON L3 OLT Series

## Datasheet v1.0



- ✓ Open to any brand of ONT
- ✓ L3 OLT, support RIP v1/v2 and OSPF v2
- ✓ Power backup
- ✓ Easy to manage and friendly interface



## Product overview

V1600G series GPON OLT products are 1U height 19 inch rack mount products. The features of the OLT are small, convenient, flexible, easy to deploy, high performance. It is appropriate to be deployed in compact room environment. The OLTs can be used for “Triple-Play”, VPN, IP Camera, Enterprise LAN and ICT applications.

Product	User interface	Unlink interface
V1600G1	8PON Port	8*GE+6*GE(SFP)+2*10GE(SFP+)
V1600G2	16PON Port	8*GE+4*1GE(SFP)/10GE(SFP+)



# functional characteristics

## Satisfactory standard

- ◆ Meet ITU-T G984/G.988 standard
- ◆ Meet China's relevant GPON standards

## L3 OLT

- ◆ Support static route RIP v1/v2、OSFP v2

## Easy to manage

- ◆ Friendly EMS/Web/Telnet/CLI management
- ◆ CLI command style similar to mainstream manufacturers
- ◆ Support APP management

## Fully open platform

- ◆ Open to any brand of ONT

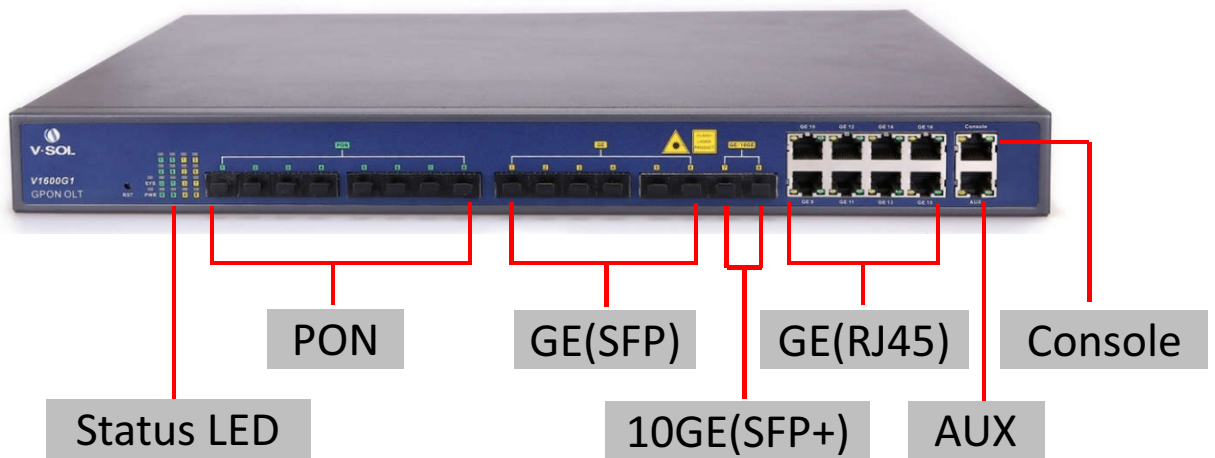
## High performance cost

- ◆ 1U height compact design
- ◆ Adopt mainstream chip scheme



# functional characteristics

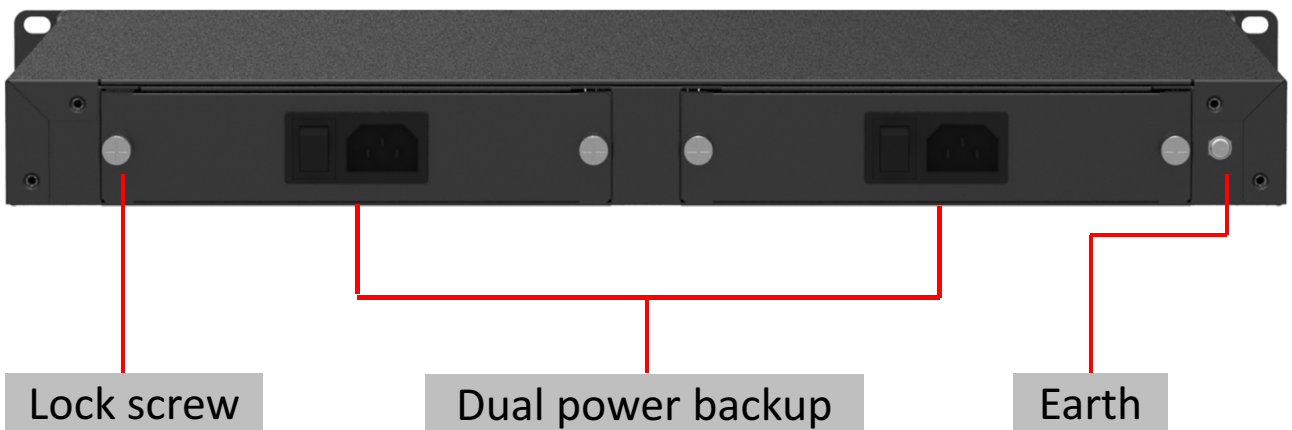
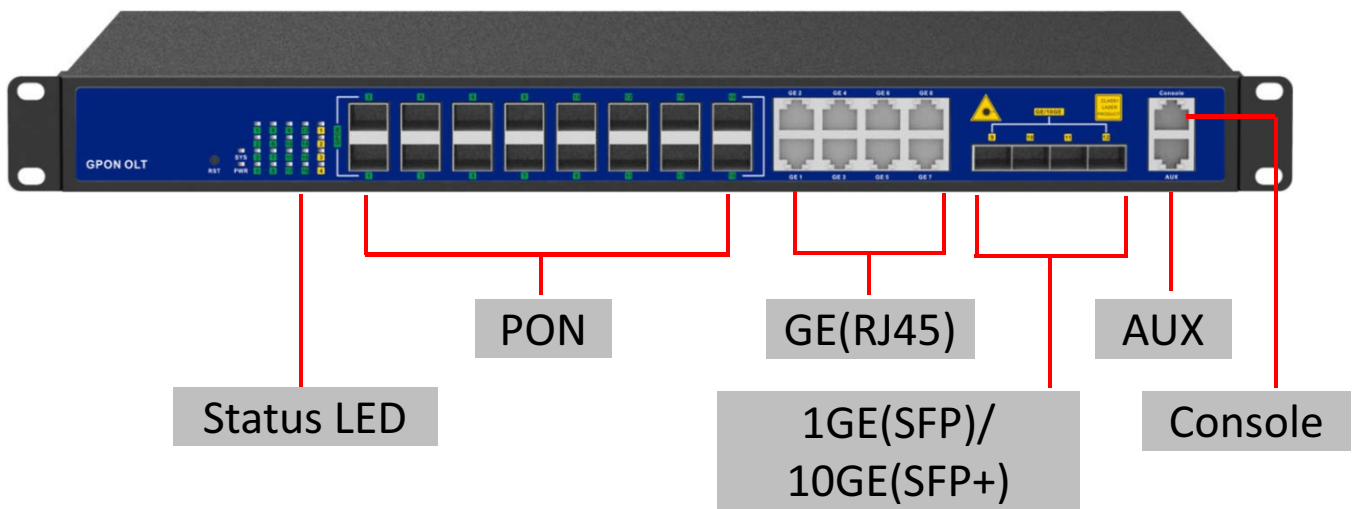
## Product appearance features





# functional characteristics

## Product appearance features





# technical indicator

Item		V1600G1	V1600G2
Chassis	Rack	1U 19 inch standard box	
1G/10G Uplink Port	QTY	16	12
	Copper 10/100/1000M auto-negotiation	8	
	SFP 1GE	6	4
	SFP+ 10GE	2	
GPON Port	QTY	8	16
	Physical Interface	SFP Slot	
	Connector Type	Class B+/C+	
	Max splitting ratio	1:128	
Management Ports	1*10/100BASE-T out-band port, 1*CONSOLE port		
PON Port Specification(Class B+ module)	Transmission Distance	20KM	
	GPON port speed	Upstream 1.244G Downstream 2.488G	
	Wavelength	TX 1490nm, RX 1310nm	
	Connector	SC/UPC	
	Fiber Type	9/125μm SMF	
	TX Power	+1~+5dBm	
	Rx Sensitivity	-28dBm	
Saturation Optical Power	-8dBm		
Dimension(L*W*H)	442*200*43.6mm	442*320*43.6mm	
Weight	3.1kg	4.5kg	
AC Power Supply	AC:90 ~ 264V, 47/63Hz		
DC Power Supply	DC:-48V	X	
Double Power Module Hot Backup	√	√	
Power Consumption	45W	85W	
Operating Environment	Working Temperature	0 ~ +50°C	
	Storage Temperature	-40 ~ +85°C	
	Relative Humidity	5~90%(non-conditioning)	



# technical indicator

## V1600G1/G2: LED information

LED	ON	Blink	OFF
<b>PWR</b>	The device is powered up	—	The device is powered down
<b>SYS</b>	Device is starting	Device is running normal	Device is running abnormal
<b>PON1 ~ PON16</b>	ONT is registered to the PON system	ONT is registering to the PON system	ONT is not registered to the PON system or ONT do not connect to OLT
<b>SFP/SFP+</b>	The device is connected to the port	The device is ongoing data transmission	The device is not connected to the port
<b>Ethernet (green-- ACT)</b>	—	Port is sending or/and receiving data	—
<b>Ethernet (yellow-- Link)</b>	The device is connected to the port	—	The device is not connected to the port



# Software function

## Management Mode

- ✓ **SNMP、Telnet、CLI、WEB**

## Management Function

- Fan Group Detecting;
- Port Status monitoring and configuration management;
- Layer2 switch configuration such as VLAN, Trunk, RSTP,IGMP,QOS, etc;
- GPON management function: DBA,ONU authorization, ACL, QOS, etc;
- Online ONU configuration and management;
- User management;
- Alarm management.

## Layer2 Switch

- 16K Mac address
- Support 4096 VLANs;
- Support port VLAN and protocol VLAN;
- Support VLAN tag/Un-tag ,VLAN transparent transmission;
- Support Vlan translation and QinQ;
- Support storm control based on port
- Support port isolation
- Support port rate limitation
- Support 802.1D and 802.1W;
- Support static LACP;
- QOS based on port,VID,TOS and MAC address;
- Access control list;
- IEEE802.x flow control;
- Port stability statistic and monitoring.





# Software function

## Multicast

- Igmp snooping
- 256 IP Multicast Groups;

## DHCP

- Dhcp server
- Dhcp relay
- Dhcp snooping

## GPON Function

- Tcont DBA;
- Gempport traffic
- In compliant with ITUT984.x standard;
- Up to 20KM transmission Distance;
- Support data encryption, multi-cast, port VLAN, separation, RSTP, etc;
- Support ONU auto-discovery/link detection/remote upgrade of software;
- Support VLAN division and user separation to avoid broadcast storm;
- Support power-off alarm function, easy for link problem detection;
- Support broadcasting storm resistance function;
- Support port isolation between different ports;
- Support ACL and SNMP to configure data packet filter flexibly;
- Specialized design for system breakdown prevention to maintain stable system;
- Support RSTP,IGMP Proxy.



# Software function

## Layer 3 Route

- Arp proxy
- Static route
- 1024 hardware Host Routes;
- 512 hardware Subnet Routes;

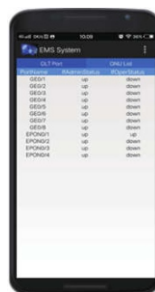
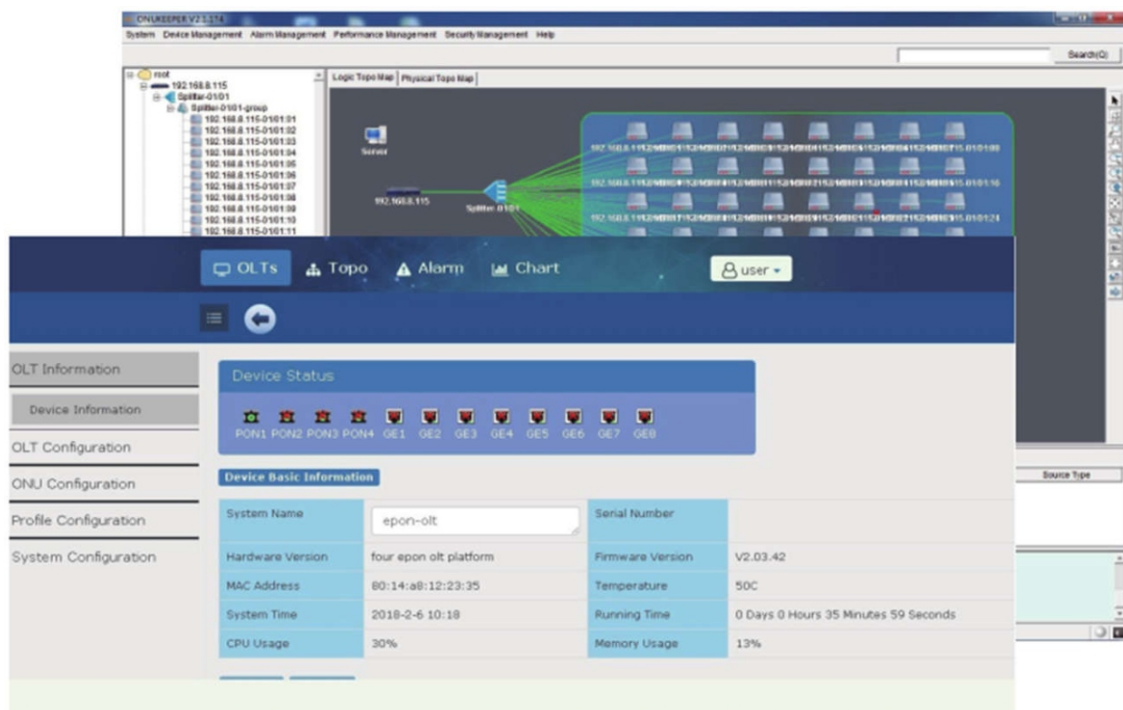
License Management	ONT limit	Limit the number of ONU registration, 64-1024, step 64. When the number of ONU reach the max number permit, add new onu to system will be refused.
	Time limit	Limit system used time, 30days. Equipment trial license, after 30days of running time, all onus be set offline.
PON mac table		A mac table of pon, including mac address, vlan id, pon id, onu id, gempport id for easier services checking, troubleshooting.
ONU management	Profile	Including ONU, DBA, TRAFFIC, LINE, SERVICE, ALARM, PRIVATE profiles. All ONU features can be configured by profiles.
	Auto learn	Onu automatically discovery, register, online.
	Auto configure	All features can be automatically configured by profiles when onu auto online—plug and play.
	Auto upgrade	The onu firmware can be auto upgraded. Download onu firmware to olt from web\tftp\ftp.
	Remote config	The powerful private OMCI protocol provides remote HGU configuration including WAN, wifi, pots, etc.



# EMS

## Key Features

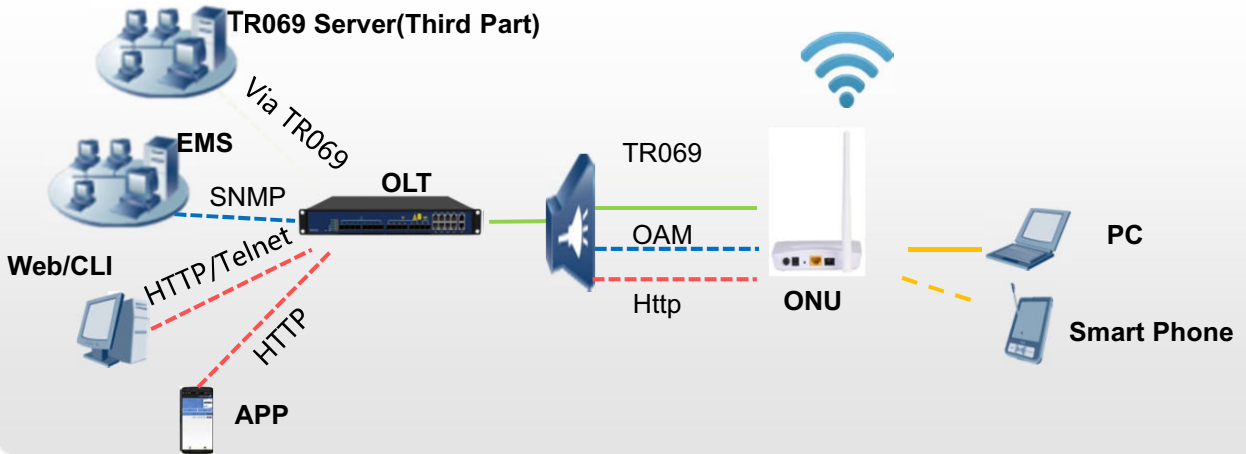
- ✓ Support C/S & B/S architecture
- ✓ Support auto topology or modify manually
- ✓ Add Trap Server to detect ONU automatically
- ✓ EMS can add and configure ONU automatically
- ✓ Add ONU position information
- ✓ Support EMS APP



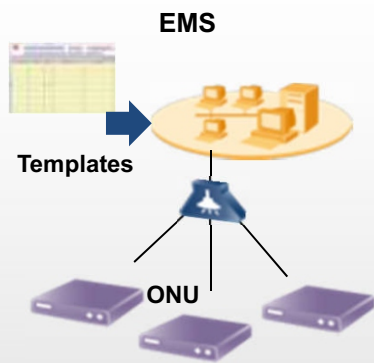


# EMS

## Support EMS/Web/Telnet(CLI)/TR069 Configuration



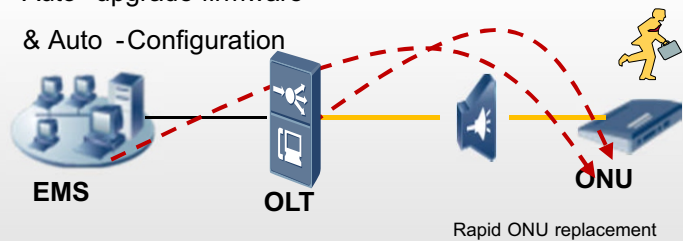
## Support ONUs Plug&Play



Device Template for Auto -Configuration

## Rapid operation and maintenance

Auto -upgrade firmware  
& Auto -Configuration





# Typical application diagram

