

V1600G0-B1 GPON OLT DataSheet

Version V2.0



Release Date 2021-04-15

1. Product Overview

V1600G0-B1 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.

2. Technical Specifications

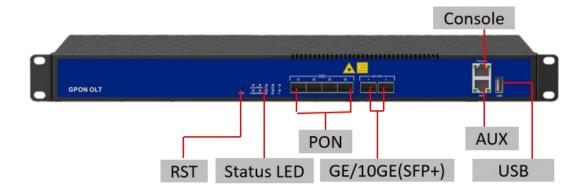
For other technical specifications, see the following table:

| Product | Product PON Interface Upl | |
|------------|---------------------------|----------------------|
| V1600G0-B1 | 4*GPON Port | 2×GE(SFP)/10GE(SFP+) |

3. Functional characteristics

| Item | V1600G0-B1 GPON OLT | |
|-----------------------|--|--|
| Satisfactory standard | ➤ Meet ITU-T G984/G.988 standards | |
| | Meet China's relevant GPON standards | |
| Easy to Manage | Open to any brand of ONT | |
| Eully on an platform | > Support static route, | |
| Fully open platform | Optional Support Dynamic route RIP v1/v2,OSPF v2 | |
| High performance cost | > 1U height compact design | |
| | Adopt mainstream chip scheme | |

4. Product Appearance





5.Product Feature

| Item | | V1600G0-B1 | |
|--------------------------------|-----------------------|---|--|
| Chassis | Rack | 1U 19 Inch Standard Box | |
| GE/10GE | QTY | 2 | |
| Uplink Port | SFP(1GE)/SFP+(10GE) | 2 | |
| | QTY | 4 | |
| GPON Port | Physical Interface | SFP Slots | |
| GPON POIL | Connector Type | Class C+ | |
| | Max splitting ratio | 1:128 | |
| Managamant Par | eta | 1*10/100BASE-T out-band port, 1*CONSOLE port, | |
| Management Por | its | 1*USB(Type-C) | |
| | Transmission Distance | 20KM | |
| | GPON port speed | Upstream 1.244Gbps, Downstream 2.488Gbps | |
| PON Port | Wavelength | TX 1490nm, RX 1310nm | |
| Specification | Connector | SC/UPC | |
| (Class C+ | Fiber Type | 9/125μm SMF | |
| module) | TX Power | +3~+7dBm | |
| module) | Rx Sensitivity | -30dBm | |
| | Saturation Optical | -12dBm | |
| | Power | -12uDiii | |
| Dimension(L*W | *H)(mm*mm*mm) | 442*220*43.6 | |
| Weight(kg) | | 2.8 | |
| Power Supply | 220VAC | AC:90~264V, 47/63Hz | |
| DC Power Supply(DC:48V) | | DC:16~48V | |
| Double Power Module Hot Backup | | \checkmark | |
| Max Power Consumption(W) | | 35 | |
| Operating | Working Temperature | -0~+55°C | |
| Environment - | Storage Temperature | -40~+85℃ | |
| Liiviioiiiieit | Relative Humidity | 5~90%(non-conditioning) | |

6.LED information

| LED | ON | Blink | OFF |
|-------|--------------------------|---------------------------|--------------------------|
| PWR | The device is powered up | | The device is powered |
| | | | down |
| SYS | Device is starting | Device is running normal | Device is running |
| | | | abnormal |
| PON1∼ | ONT is registered to the | ONT is registering to the | ONT is not registered to |

| PON4 | PON system | PON system | the PON system or ONU |
|---------------|-------------------------|------------------------|------------------------|
| | | | do not connect to OLT |
| SFP/SFP+ | The device is connected | The device is ongoing | The device is not |
| SFP/SFP+ | to the port | data transmission | connected to the port |
| Ethernet | | Port is sending or/and | |
| (green-ACT) | | receiving data | |
| Ethernet | The device is connected | | The device is not |
| (yellow-Link) | to the port | | connected to the port |
| PWR1/PWR2 | Power module online and | | Powr module offline or |
| (G0) | work normal. | | not work |

7.Software Feature

| Item | V1600G0-B1 GPON OLT | |
|--------------------|---|--|
| Management Mode | > SNMP,Telnet,CLI,WEB,SSH v1/v2; | |
| | Fan Group Control; | |
| | Port Status monitoring and configuration management; | |
| Management | Online ONT configuration and management; | |
| | ➤ User management; | |
| | ➤ Alarm management; | |
| | > 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; | |
| Layran 2 | > Support port isolation; | |
| Layer 2 | > Support port rate limitation; | |
| | ➤ Support 802.1D and 802.1W; | |
| | Support static LACP, Dynamic LACP; | |
| | QoS based on port, VID, TOS and MAC address; | |
| | > Access control list; | |
| | ➤ IEEE802.x flow control; | |
| | Port stability statistic and monitoring; | |
| M-14:4 | ➤ IGMP snooping; | |
| Multicast | ➤ 256 IP Multicast Groups | |
| DUCD | ➤ DHCP server,DHCP relay,DHCP snooping; | |
| DHCP | ► DHCP option82; | |
| Layer 3 | ➤ ARP proxy,1024 hardware Host Routes,512 hardware Subnet Routes; | |

| | > | Support 802.1X,Radius,Tacacs+; |
|---------------|---|--|
| | > | Support IP source guard; |
| | > | Support static route; |
| | > | Optional Support Dynamic route RIP v1/v2,RIPng; |
| | > | Optional Support OSPF v2/v3; |
| | > | Support NDP; |
| | > | Support IPv6 Ping,IPv6 Telnet,IPv6 routing; |
| IPv6 | > | Support ACL based on source IPv6 address, destination IPv6 address, |
| | | L4 port, protocol type, etc; |
| | > | Support MLD v1/v2 snooping(Multicast Listener Discovery snooping); |
| | > | Tcont DBA; |
| | > | Gemport traffic; |
| | > | In compliant with ITUT984.x standard; |
| | > | Up to 20KM transmission Distance; |
| | > | Support data encryption, multi-cast, port VLAN, separation, RSTP, etc; |
| | > | Support ONT auto-discovery/link detection/remote upgrade of |
| | | software; |
| GPON Function | > | 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; |

| License | | Limit the number of ONT registration, 64-1024, step 64. When |
|---------------|----------------|--|
| | ONT limit | the number of ONT reach the max number permit, add new |
| | | ONT to system will be refused. |
| Management | Time limit | Limit system used time, 31days. Equipment trial license, after |
| | | 31days of running time, all ONTs be set offline. |
| PON Mac Table | | A MAC table of PON, including MAC address, VLAN id, |
| | | PON id, ONT id, gemport id for easier services checking, |
| | | troubleshooting. |
| | Profile | Including ONT, DBA, TRAFFIC, LINE, SERVICE, ALARM, |
| | | PRIVATE profiles. All ONT features can be configured by |
| | | profiles. |
| | Auto learn | ONT automatically discovery, register, online. |
| ONT | Auto configure | All features can be automatically configured by profiles when |
| Management | | ONT auto online—plug and play. |
| | Auto upgrade | The ONT firmware can be auto upgraded. Download ONT |
| | | firmware to OLT from web/tftp/ftp. |
| | Remote config | The powerful private OMCI protocol provides remote HGU |
| | | configuration including WAN, WiFi, POTS, etc. |

8.EMS Feature

8.1Key Features

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

