

OLT3000-1GP, Single-Port Mini GPON OLT with 1x 10G SFP+, 1x GPON/XG(S)PON Uplink Port, 3x GE Downlink Ports, 1x MGMT Port

Mini GPON OLT, Optical Access & FTTx Network



Overview

The OLT3000-1GP is a single-port GPON OLT with a fanless design, compact size, and low power consumption, making it easy to integrate and deploy. It supports both Ethernet and PON networks to meet multi-service requirements and improve return on investment. The uplink interface supports 10GE, GPON, XG(S)PON and 10G EPON. The downlink supports GE and GPON with flexible networking options. A single GPON port can connect up to 32 ONUs over a distance of up to 20 km.

With plug-and-play setup and hot-swappable AC+DC power, it simplifies installation and maintenance. Ideal for scenarios with limited equipment room space, low user density, and various FTTx applications such as residential access, small business offices, government and enterprise networks, and video surveillance.

Note: On the OLT3000-1GP, the LAN4 port is fixed as the management port. A PC must be connected to LAN4 to access the new web interface.

Highlights

- Supports Ethernet and PON with Uplinks up to 10Gbps and Downlinks at 1/2.5Gbps
- G.Support GPON/XGPON/10GE/10GEPON/XGSPON ITU-T G.984 Implementation
- Plug-and-Play Bridge Mode for Easy Network Integration
- DBA, QoS and Port rate limit for Service Quality Guarantee
- Supports Data Encryption, Multicast, Port-based VLANs (4096), and Traffic Isolation
- Enables ONT Auto-discovery, Link check, Remote Upgrade, and Power Loss Alarm
- Compact 1U design ideal for small businesses and FTTx deployments

Product Specifications

Parameter	Description
Downlink Ports	3x GE (1G MM not supported) 1x GPON
Uplink Ports	1x 10G SFP, 1x XGPON/GPON
Transmission Speed	Downstream 2.5Gbps, Upstream 1.25Gbps
Optical Split Ratio	Up to 32
Maximum Transmission Distance	20KM
Multicast	IGMP Snooping up to 256 multicast groups
Management	Supports Telnet, CLI, and WEB management Port status monitoring and configuration management Remote ONT configuration and management User management Alarm management
Layer 2 Switching Features	Supports up to 1K MAC addresses Supports up to 4096 VLANs Supports port-based VLANs VLAN tag/untag and VLAN transparent transmission Supports VLAN stacking (QinQ) and P2P Storm control based on port Port isolation Port rate limiting Compliant with IEEE 802.1D and 802.1W Access control list (ACL) IEEE802.x flow control Port performance monitoring and traffic statistics
DHCP	DHCP server, DHCP relay DHCP Option 82 DHCPv6 server and DHCPv6 relay
Layer 3 Features	Supports dynamic and static ARP WAN connections: DHCP / PPPoE / Static IP Supports NAT and DMZ QoS based on DSCP, MAC, IP, Layer 4 ports, and protocols ACL rules based on source MAC address, source IP, source L4 port, destination IP, destination L4 port, and protocol type

Product Specifications

Parameter	Description
IPv6 Routing Table	Supports IPv6 Ping, IPv6 Telnet, and IPv6 routing ACL rules based on source MAC address, source IPv6 address, source L4 port, destination IPv6 address, destination L4 port, and protocol type Supports IPv6 SLAAC (Stateless Address Autoconfiguration) Supports MLD v1/v2 snooping (Multicast Listener Discovery snooping)
GPON Features	T-CONT with DBA (Dynamic Bandwidth Allocation) GEM port-based traffic management Compliant with ITU-T G.984.x standards Transmission distance up to 20 km Supports data encryption, multicast, port-based VLAN, and traffic isolation Supports automatic ONT discovery, link detection, and remote software upgrades Supports VLAN segmentation and user isolation to prevent broadcast storms Power failure alarm for easier link issue detection Broadcast storm protection supported
Dimensions (HxWxD)	1.77" × 10.75" × 6.9" (45x273x176mm)
Operating Temperature	-4° F to 140 °F (-20° C to 60° C)
Storage Temperature	-40° F to 176° F (-40° C to 80° C)
Operating Humidity	5% to 95% RH (non-condensing)
Atmospheric Pressure	-86 to 106 kPa
Dust and Water Protection	IP40 (protected against solid objects larger than 1.0 mm)