

Everon® SD-LAN GPON OLT



1LAN-SDOLT-G81



Rear View

The Corning 1LAN-SDOLT-G81, GPON OLT, is a 1 RU OLT solution that is fully ITU-T G.984/G.988 standards compliant. It can support triple play services at an aggregate of 20Gbps while utilizing LACP/LAG on uplinks.

Capable of 8 PON links, each delivering 2.5Gbps (downstream)/1.25Gbps (upstream) of shared bandwidth between up to 64 subscribers it is possible to serve a maximum of 512 subscribers. Uplink connections are possible with available (2) 10GE SFP+ and (2) GE SFP interfaces.

The Enriched Bandwidth Allocation Policies of the device supports 1024 ALLOC-IDs, 4096 GEM-Ports, and 5 T-CONT types. The OLT adheres to ITU-T G.984.3 as well. The enriched QoS features such as traffic policy/traffic shaping/rate limit/Schedule allows customers to provision flexible bandwidth policy for multiple user and service types.

Powerful OMCI functions enable remote diagnostics, flexible provisioning, and reconfiguration through the Corning® Everon® SD-Lan Orchestration platform.

| Features | Capabilities |
|--------------------------|---|
| PON | <ul style="list-style-type: none"> ▪ Split Ratio: 1:64 ▪ 4095 GEM ports ▪ 1024 T-CONT ▪ Support B+/C+ PON transceiver ▪ SN/SN+Password ONU authentication ▪ FEC ▪ ONU digital diagnostic monitor ▪ Rogue ONU detection |
| L2 | <ul style="list-style-type: none"> ▪ Wire-rate switch/forwarding ▪ 32K MAC address table ▪ Port-based VLAN, Protocol-based VLAN, 802.1q VLAN ▪ ONU-based QinQ, 1:1/N:1 VLAN translate ▪ LACP/LAG ▪ RSTP ▪ Port mirror ▪ Flow control/Back pressure ▪ Broadcast/DLF/Unknown multicast storm control |
| L3 | <ul style="list-style-type: none"> ▪ Switch Virtual Interface (SVI) ▪ Static route ▪ Static/Dynamic ARP ▪ ICMP/Traceroute ▪ DHCP Server/DHCP Relay |
| Multicast | <ul style="list-style-type: none"> ▪ IGMP v1/v2 snooping ▪ MLD v1 snooping ▪ IGMP snooping with proxy ▪ Fast leave ▪ 2K IGMP table |
| QoS (Quality of Service) | <ul style="list-style-type: none"> ▪ IEEE 802.1p, 8 CoS queue ▪ SP/WRR/SP+WRR ▪ IPv4 TOS/IP Precedence ▪ Classification/Shaping/Policy/Rate limit/Schedule ▪ DBA ▪ ONU-based bandwidth control in downstream |
| OAM | <ul style="list-style-type: none"> ▪ FTP/TFTP, SNMP v1 and v2c, Telnet, Console (CLI) ▪ In-band/Out-band management ▪ Auto provision for ONU configuration ▪ PM |

Specifications

| Product Specifications | |
|------------------------|---|
| Physical | |
| Size | 482 mm (W) x 293 mm (D) x 44 mm (H) |
| Weight | 4.8 kg |
| Power | DC: -48V/AC: 220V (Pluggable) Dual DC/Dual AC power redundancy |
| Form | 1U chassis with CSM&Uplink&PON/ FAN/Anti-dust card |
| Size | 482 mm (W) x 293 mm (D) x 44 mm (H) |
| Console | 1 RJ45 (RS232) interface |
| Out-band interface | 1 RJ45 10/100Base-T interface |
| Uplink Interface | 2 SFP GE/2 SFP+10GE interface |
| PON interface | 8 GPON interface |
| PON fiber type | SM, BIDI |
| PON interface type | SC UPC |
| Power | |
| PSUs | 2 redundant, hot swappable AC |
| Input Voltage | 85-260 VAC, 50-60 Hz |
| Input Current | Min. 0.22 A @ 120 VAC (26.7 W) Max. (fully loaded) 0.4A @ 120 VAC (47.2 W) |
| Parameters | |
| PSUs | 2 redundant, hot swappable AC |
| Throughput | 65.5/95.2 Mpps |
| Flash Size | 64 M Bytes |
| Memory Size | 1 G Bytes |
| Consumption | 36 W/50 W |
| Bandwidth | 1.25 Gbps (Upstream) 2.5 Gbps (Downstream) |
| PON Tx Power | 3~7 dBm (C+) |
| PON Rx Sensitivity | -30 dBm (C+) |
| PON Rx Overload | -6 dBm (C+) |
| Wavelength | 1490 nm 1310 nm |

Specifications (continued)

| Product Specifications | |
|----------------------------|--------------------------------------|
| Environment | |
| Operating Temperature (C) | -5°~45° |
| Storage Temperature (C) | -40°~70° |
| Relative Humidity | 10%~90%, no condensing |
| Standards Compliance | |
| ITU-T G.984/G.988 | |
| IEEE 802.1D, Spanning Tree | |
| IEEE 802.1Q, VLAN | |
| IEEE 802.1w, RSTP | |
| IEEE 802.3ad, LACP | |
| Ethernet – II | |
| Regulatory | |
| PSUs | FCC CFR 47 Part 15B, ANSI C63.4-2014 |

Ordering Information

| Description | Part Number |
|--|----------------|
| GPON 8 port OLT, 2 uplink, 1RU, dual AC power supplies | 1LAN-SDOLT-G81 |
| SFP OLT GPON 2.5 GE 20 KM, TX/RX Class B+ | 1LAN-SFP-GPON |

CORNING

Corning Optical Communications LLC • 4200 Corning Place • Charlotte, NC 28216 USA
800-743-2675 • FAX: 828-325-5060 • International: +1-828-901-5000 • www.corning.com/opcomm

Corning Optical Communications reserves the right to improve, enhance, and modify the features and specifications of Corning Optical Communications products without prior notification. A complete listing of the trademarks of Corning Optical Communications is available at www.corning.com/opcomm/trademarks. All other trademarks are the properties of their respective owners. Corning Optical Communications is ISO 9001 certified. © 2025 Corning Optical Communications. All rights reserved. LAN-3389-AEN / January 2025