Corning ONE™ SDN LAN

Software Defined Optical Line Terminal (SDOLT)

Product Overview |

Software Defined Optical Line Terminal (SDOLT) is designed to provide broadband access over all Optical Network.

Software Defined Access Nodes (SDAN) are used to connect the optical network to the end user. You can connect up to 64 SDAN to each interface. Access to the network is provided through up to two SFP+ high speed uplink interfaces.

The SDOLT allows the network engineer to build scalable, fault tolerant point-to- multipoint networks to ensure the highest reliability. The Software Defined Orchestration Platform (SDOP) allows for provisioning of services, port level management, traffic switching and prioritization, and connection to the network.

Product Specifications|

4 Port

8 Port

INTERFACES

4 Port

Uplink

- 2 x 10GBase (SFP+)/1000 Base-X ports
- 4 x Combo 10/100/1000 Base-T/1000 Base-X (SFP)

Subscriber Line Interfaces

- 4 x GPON (2.5/1.25 Gbps)
- Up to 256 SDAN

8 Port

Uplink

- 2 x 10GBase (SFP+)/1000 Base-X
- 4 x Combo 10/100/1000 Base-T/1000 Base-X (SFP)
- 4 x 10/100/1000 Base-T

Subscriber Line Interfaces

- 8 x GPON (2.5/1.25 Gbps)
- Up to 512 SDAN

GPON

- 9/125, G.652 µm single-mode fiber (SMF)
- Up to 1:64 splitting radio
- Received Signal Strength Indication (RSSI)
- Support DDM (show parameters in CLI)
- Digital RSSI
- Module Temperature
- Supply Voltage
- Laser Bias Current
- Tx Optical Power Output

Class B+ SFP:

- Standard ITU-T G.984.2, FSAN Class B+, SFF-8472
- Max link distance – 20 km
- Transmitter: 1490nm DFB Laser
- Data Rate: 2488Mbps
- Average Launch Power +1,5..+5 dBm
- Spectral Line Width-20 dB 1.0 nm
- Receiver: 1310nm APD/TIA Detector/Amplifier
- Data Rate: 1244Mbps
- Receiver Sensitivity -28 dBm
- Receiver Optical Overload -8 dBm

Switching

- Ethernet switcher - Marvell Packet Processor
- 128 Gbps switch capacity
- MAC addresses - 16K
- 4K active VLAN, IEEE802.1Q, double tagging (Q-in-Q)
- QoS

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Physical and Environmental

- Power:
  - 48 V (-36..-72) DC
  - Max Power: 20W
- Ambient Operating Temperature: +5 to 40 C
- Humidity: up to 80%, non-condensing
- Dimensions: with internal power supply module 430x44x258 (HxWxD) mm, 19", 1U

STANDARD COMPLIANCE

- ITU-T G.988 GPON
- ITU-T G.984x GPON
- IEEE 802.3i 10BASE-T Ethernet
- IEEE 802.3u 100BASE-T Fast Ethernet
- IEEE 802.3ab 1000BASE-T Gigabit Ethernet
- IEEE 802.3z Fiber Gigabit Ethernet
- ANSI/IEEE 802.3 NWay auto-negotiation
- IEEE 802.3x Full Duplex and flow control
- IEEE 802.3ad Link aggregation
- IEEE 802.1p Protocol for Traffic Prioritization
- IEEE 802.1Q Virtual LANs
- IEEE 802.1ad Provider Bridges (QinQ)
- IEEE 802.1v VLAN Classification by Protocol and Port
- IEEE 802.3ac VLAN tagging
- IEEE 802.1d MAC bridges
- IEEE 802.1w Rapid Reconfiguration of Spanning Tree
- IEEE 802.1s Multiple Spanning Trees

FEATURES AND BENEFITS

- MAC-address learning/aging
- MAC-address-table limit
- Handling unknown MAC-address
- Handling multi-addresses traffic
- Support to 1024 multicast groups
- Double tagging (Q-in-Q), IEEE 802.1ad
- IGMP Proxy
- IGMP Snooping
- IGMP fast leave
- VLAN 1 port-isolation
- STP, RSTP, MSTP

MANAGEMENT

- CLI, SNMP
- SDOP

Ordering Information |

P/N	Short Description
1LAN-SDOLT-0588	OLT, 8 ports SFP-xPON, NO SFPs
1LAN-SDOLT-0587	OLT, 4 ports SFP-xPON, NO SFPs
1LAN-SFP-3405BC	Bi-Di SFP; SDDP to SDDP/SDOLT
1LAN-SFP-4305BC	Bi-Di SFP; SDDP/SDOLT to SDAN
1LAN-SFP-0035	SFP xPON 2.5 GE 20 km, TX/RX
1LAN-SFP-1GCU	Copper Ethernet SFPs (1G-TX)
1LAN-SFPP-10GB-LR	10Gb/s SFP+ Transceiver module, SMF, 1310nm, 10km
1LAN-SFPP-10GB-SR	10Gb/s SFP+ Transceiver module, MMF, 850nm, 300-meter
1LAN-SFP-1GB-LXLH	Gigabit SFP Transceiver, 1000Base-LX/LH, SMF, 1310nm, 10km
1LAN-OA-UPC	UPC Optical Attenuator