Everon SD Access Node

Software Defined Access Node (SDAN) 8011, Micro Family

Product Overview |

Corning's low-profile single port Software Defined Access Node (SDAN) with Power over Ethernet Plus incorporates a highly scalable integrated networking approach while leveraging the benefits of a fiber deep network architecture. Corning's Micro family of SDAN's are built using the latest generation SoC leveraging the most recent advances in technology, along with unrivaled hardware acceleration, QoS and efficient power management that meet the bandwidth demands of high-performance applications. Corning's SDAN offerings are all technology-neutral supporting both Active Ethernet as well as GPON transport.

Features	Benefits
Optical Interface	The SDAN terminates GPON or Active Ethernet fiber via a single SC/APC type optical connector and complies with GPON Standard ITU-T Rec. G984.2 Amendments. In GPON mode, the SDAN receives data at 2.488 Gbps and sends upstream data at 1.244 Gbps over 1490 nm, 1310 nm wavelengths respectively. In Active Ethernet mode, the SDAN transmits and receives at 1 Gbps. The following physical layer features are supported: • Class B+ and optionally Class C optics. • Class I laser Transceiver complies with FDA21 CFR 1040.10 and 1040.11. • Received Optical Power monitoring.
In-Wall Mounting	The 8011 SDAN is designed to be mounted inside a standard 4"x4" electrical outlet box in the wall. The unique "L" shaped form factor allows it to fit inside the outlet box with easy cable management. The metal enclosure is temperature-hardened to withstand industrial environments.
PoE	With PoE++ functionality, the SDAN connects to any powered device (PD) terminal devices such as IP-Phones, IP-Camera, Access Points, and other equipment that can be powered from the Ethernet port. The 8011 SDAN allows a maximum of 60W power from the 802.3bt capable ethernet port.
Local Area Network (LAN) Interface	The 8011 SDAN consists of 1 Gigabit Ethernet port compliant with IEEE 802.3, 802.3u, and 802.3ab standards • High-speed LAN interface • Configurable bandwidth and Class of service • IGMP v2 and v3 proxy • IEEE 802.1d transparent bridge (RFC-2684) • PPPoE Client and DNS/DHCP Server functionality • LAN functions including Bridging, Routing, • Filtering, NATP translation • MAC level ITU 802.1p QoS standards for Streaming IP video and IPTV content delivery
SDN Ready	The Corning Micro 8011 SDAN supports provisioning through Corning SD-LAN's next generation, Orchestration Platform and virtual Network Commander. The 8011 supports OMCI provisioning as well as TR-69 communication bridging the gap between current and next generation Software Defined Access networks.
IPTV	Packet based interactive IPTV services including multicast video. Proxy reporting & Snooping.

Product Specifications

Optical	• GPON: 2.5 Gbps downstream, 1.244 Gbps upstream • AE: 1 Gbps downstream/upstream • Optical wavelengths: 1490 +/-10nm Rx, 1310 +/-20nm Tx • Launch power: 0.5 to +5 dBm • Receiver Sensitivity: -27 dBm • Input power overload: -8 dBm • Received optical power monitoring • Configurable GPON/Active Ethernet
GPON	• Serial number discovery and Registration ID provisioning • ITU-T G.984/G.988 compliance • DBA support via mode-0 DBRu (piggy-back) reporting • Dying Gasp • Downstream 128-bit AES support • Forward Error Correction (FEC) • Upstream Traffic Management using Priority-based or Rate-controlled scheduling • Support for up to 8 T-CONTS with multiple priority queues per T-CONT • Multiple GEM ports with flexible mapping between TCONTs and Priority queues • pBit based GEM port and upstream Priority queue selection • IPTV traffic filtering (Multicast GEM port)
Enterprise LAN	• One RJ-45 10/100/1000 Base-T interface • MDI/MDIX auto-sensing and auto-negotiation • 802.1d Ethernet bridging and switching • 802.1p marking/remarking, DSCP mapping • 802.1Q including VLAN translation, filtering, tagging, stacking (QinQ) • Up to 25 VLAN groups per port • Automatic MAC address learning, aging and filtering • Up to 1024 MAC address entries • Up to 256 multicast groups • IGMP v2/v3 Snooping with immediate leave • Downstream pBit and flow-based queue selection • Downstream Flow and port-based Rate Limiting • WAN DHCP Client and LAN DHCP Server • Network Address and Port Translation • Firewall and WAN, LAN Security
LED Indicators	• Fiber • Alarm • Status • Reset

OAM and Management	• ITU-T G.984.4/G.988 management • Remote firmware upgrade and automatic rollback • Webserver for local management • ACS - CWMP (TR-069) configuration, diagnostics and software download • TR-101, TR-111, TR-124, TR-143
GE Power Over Ethernet Ports	• One Independent PSE Gigabit Ethernet Port • Compliant with IEEE 802.3af, 802.3at, 802.3bt • Types 1, 2, 3 • 0.25Ω sense resistance per channel • Automatic detection of Power Type and Status Power Priority Management; support legacy power device and LLDP power device

Power	• Wall Adaptor
	  o 100-240VAC in, 50/60Hz
	• PSU-6/Remote Power: Phoenix Connector
	  o 2-pin
	  o 54VDC, 0.74A max

Physical & Environmental	• Size: 3.35" H x 2.83" W x 1.18" D (85mm x 72mm x 30mm) • Weight: 174g • Temperature: -30°C to +60 °C (-22°F to +140 °F) • Humidity: 10% to 90%, non-condensing
Regulatory	EMC: FCC PART 15, SUBPART B, CLASS B, EN 55022, EN 55024, EN 300 386, CLASS B, CE, RoHS6, WEEE Compliant Safety: UL/CSA 60950, IEC 60950, ETSI FDA – FCC 47 CFR Part 15, Class B and FDR 21 CFR 1040.10 and 1040.11 Class 1

Ordering Information

Part Number	Description
1LAN-SDAN-8011	SW DEF (ONT), 1GE, POE+, hardened, micro
1LAN-SDAN-PWRSUP2	SDAN Power Supply (Wall Plug-in)