Everon™ SD Access Node

Software Defined Access Node IW4P (SDAN), Micro Family

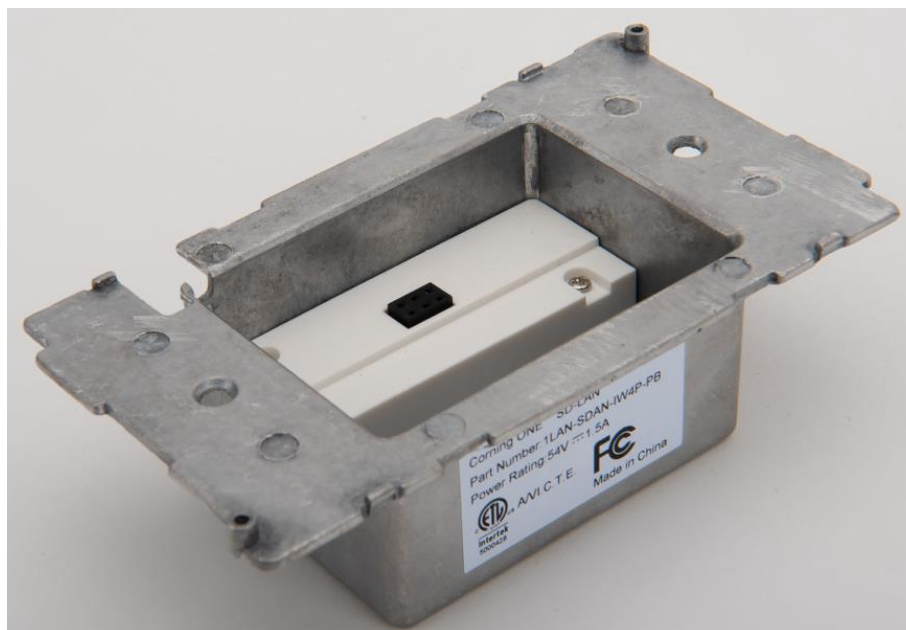*1LAN-SDAN-IW4P*

Product Overview |

Corning's low-profile wall plate 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.
IPTV	Packet based interactive IPTV services including multicast video. Proxy reporting & Snooping.
PoE	With POE functionality, the ONT connects to any powered device (PD) terminal devices such as IP- Phones, IP-Camera, and other equipment that can be powered from the Ethernet port. The 1LAN-SDAN-IW4P SDAN allows a maximum of 30W per port or 60W total PoE power from the four 802.3at capable ethernet ports. .
Local Area Network (LAN) Interface	The 1LAN-SDAN-IW4P SDAN consists of 4 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
In-Wall phased install	The 1LAN-SDAN-IW4P SDAN is designed to be mounted inside a standard 1 gang electrical outlet box in the wall. The unique 3-piece form factor allows the power backer box to fit inside the outlet box with easy cable management for pre-wire. The SDAN electronics and aesthetic faceplate allow for snap-in install and staged deployment.
SDN Ready	The Corning 1LAN-SDAN-IW4P in-wall SDAN supports provisioning through Corning SD-LAN's next generation, Orchestration Platform and virtual Network Commander. The IW4P supports OMCI provisioning as well as TR-69 communication bridging the gap between current and next generation Software Defined Access networks.

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 • Auto Detect 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 • Support for up to 8 T-CONTS with multiple priority queues per T-CONT • Forward Error Correction (FEC) • Upstream Traffic Management using Priority- based or Rate-controlled scheduling • 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	• Four RJ-45 IEEE 802.1 10/100/1000 Base-T interfaces • 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) • Max MTU Size 2000 bytes • 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 LAN port 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	• Power • Management • GE1-4
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, performance monitoring, diagnostics, and software download • TR-101, TR-111, TR-124, TR-143
GE Power Over Ethernet Ports	• Four Independent Power Sourcing Equipment (PSE) Gigabit Ethernet Ports • Compliant with IEEE 802.3af, 802.3at Type 1 and 2 • 0.25Ω sense resistance per channel • Automatic detection of Power Type and Status Power Priority Management; support legacy power device and LLDP power device.
Mechanical	• In-wall mount to wall Power Base • 48-56VDC, 1.3A max • 48V feed is rear facing • Optical connection top facing • PSU-6/Remote Power: • 2-wire, 2-Pin Phoenix type power connector
Dimensions (H x W x D) and Weight	• Size: 4.76" x 2.80" x 2.17" (121 X 71 X 55 mm) • Partially recessed in backer box • Weight: 0.255 kg
Environmental	• Temperature: 0°C to +40 °C (32°F to +104 °F) • Humidity: 10% to 90%, non-condensing
Regulatory Compliance	• 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 • EMC: FCC PART 15, SUBPART B, CLASS B • EN 55022, EN 55024, EN 300 386, CLASS B • CE: Compliant • RoHS6: Compliant • WEEE: Compliant

1LAN-SDAN-IW4P-PB

1LAN-SDAN-IW4P-ONT

Ordering Information

Part Number	Description
1LAN-SDAN-IW4P	4 port PoE+ in wall SDAN with Power Base & Cover Plate
1LAN-SDAN-IW4P-ONT	4 port PoE+ in wall SDAN & Cover Plate only (No Power Base)
1LAN-SDAN-IW4P-PB	4 port PoE+ in wall Power Base only (No SDAN)
1LAN-SDAN-IW4P-10PB	4 port PoE+ in wall Power Base only 10pk (No SDAN)

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