

Everon SD Access Node

Software Defined Access Node 8211 (SDAN), FTTH Micro Family



Product Overview |

Everon Software Defined Access Node (SDAN), Micro incorporates a highly scalable integrated networking approach leveraging Optical Fibers inherent reach and passive nature to deliver advanced network access solutions using the most simplified architecture. SDAN's are network technology agnostic.

SDANs are built using the latest 4th generation processors leveraging the latest advances technology, along with unrivaled hardware acceleration, QoS and efficient power management that meets the bandwidth demands of businesses and backhaul needs of wireless technologies.

Features	Benefits
Optical Interface	<p>The SDAN terminate 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 ONT receives data at 2.488 Gbps and sends upstream data at 1.244 Gbps over 1490 nm, 1310 nm wavelengths respectively. The following physical layer features are supported:</p> <ul style="list-style-type: none"> • Class B+ and optionally Class C optics. • Class I Laser Transceiver complies with FDA21 • CFR 1040.10 and 1040.11. • Received Optical Power monitoring
POTS - Plain Old Telephone Service	<p>The SDAN supports plain old telephone voice services over one RJ-11 connector:</p> <ul style="list-style-type: none"> • VoIP Softswitch or CLASS 5 based high quality voice service through one POTS line or VoIP access through one of three Ethernet interfaces. • Support for all protocols in one software load (SIP, MGCP, H.248)
Residential Gateway Functionality	<p>The SDAN supports Residential Gateway Service.</p> <ul style="list-style-type: none"> • Private network address translation (NAT)
Local Area Network (LAN) Interface	<ul style="list-style-type: none"> • Multiple high-speed LAN interface • Provider 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
IPTV	<p>Packet based interactive IPTV services including multicast video and video-on-demand.</p>

Product Specifications

Optical	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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 Advanced Encryption Standard (AES) support • Forward Error Correction (FEC) • Upstream Traffic Management using Priority-based or Rate-cSDANrolled 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	<ul style="list-style-type: none"> • 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) • Up to 12 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
Voice	<ul style="list-style-type: none"> • RJ-11 connector • 5 REN per line, Loop start, Balanced and unbalanced ringing • Country specific coefficients and tones • Metallic loop testing (GR-909) • SIP (RFC 3261), MGCP (RFC 3435), H.248 (RFC 3525)

	<ul style="list-style-type: none"> • DTMF dialing and encoding by RELAY or IN-BAND method • CLASS service support (Caller ID, Call Waiting, Call Forwarding, Call Transfer etc.) G.711 (μ & a law), G.726-32, G.722, G.729 • Echo Cancellation • T.38 and IN-BAND Fax • Voice Activity Detection and Comfort Noise Generation • Proven interoperability with major soft switch and voice gateway vendors • DHCP Client or static IP configuration • Official Metaswitch and BroadSoft Certifications
LED Indicators	<ul style="list-style-type: none"> • Power • Battery • Fail • LAN Data (ETH 1) • LAN Data (ETH 2) • POTS • Management
OAM and Management	<ul style="list-style-type: none"> • ITU-T G.984.4/G.988 management • Remote firmware upgrade and automatic rollback • Webserver for local management • SIP configuration from remote server • ACS - CWMP (TR-069) configuration, performance monitoring, diagnostics and software download • TR-101, TR-111, TR-124, TR-143
Mechanical	<ul style="list-style-type: none"> • Desktop (via Cradle) or wall mount • In-wall mount to dual gang electric box • 12V DC power Feed • Optical connection can be rear facing or bottom facing • UPS, simple 2-wire or barrel type power connectors • Industrial Temperature rated • Rated for use in Air Handling Spaces (Plenum)
Dimensions (H x W x D) and Weight	<ul style="list-style-type: none"> • Size: 5.45 x 5.45 x 1 inches (139 x 139 x 25.4 mm) • Weight: 1.5 lb (.7 kg)
Environmental	<ul style="list-style-type: none"> • Temperature: -40 °C to +60 °C (-40 °F to 140 °F) ambient • Humidity: 5% to 90%, non-condensing
Regulatory Compliance	<ul style="list-style-type: none"> • 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



Model 1LAN-SDAN-8211 Rear View showing Optical connector SC/APC port, from the back side of the unit

Ordering Information

Part Number	Description
1LAN-SDAN-8211	SDAN, 1 POTS 2GE, 12V DC Power Supply included

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