HIRSCHMANN
A BELDEN BRAND

Product: OpEdge-8D

Industrial Edge Gateway Device for DIN Rail Mounting

Product Description

The Hirschmann OpEdge-8D is an industrial-grade, DIN rail mount edge gateway device that brings edge computing capability to automation infrastructure for processing the large volumes of operational data generated in today's highly connected industrial environments.

Technical Specifications

Product description

Type:	OpEdge-8D
Part Number:	942330001
Port type and quantity:	7 ports in total: 5 x Gigabit Ethernet RJ45 LAN + 2 x Gigabit Ethernet SFP WAN
Port Speed:	10/100/1000 Mbit/s RJ45, 1000 Mbit/s SFP

More Interfaces

USB interface:	2 x USB 3.0 socket to connect an approved USB storage device
Serial:	2 x DB9 serial interfaces for RS232 protocols
Power Supply:	1 x plug-in terminal block, 6-pin

Hardware

Bypass:	2 x Gigabit Ethernet Copper (2 x 1) with Gen3 Bypass
CPU:	Intel Atom E3950 @ 1.6GHz
Encryption:	TPM 2.0 (Trusted Platform Module)
Memory:	DDR3L 8GB
Storage:	64GB SSD storage

Power requirements

Operating Voltage:	Dual 20 ~ 54 V DC
Power consumption:	max. 25 W
Power output in BTU (IT)/h:	58 Btu (IT)/h

Security features

Multipoint VPN:	External connectivity via OpenVPN, IPsec or Belden Horizon™ console

Service

Protocols:	SNMPv3, HTTPS, SSL-VPN, L2TP, Ping, NTP (Client/Server), DNS, Dynamic DNS, DHCP (server/client), Syslog Industrial Protocols* • MQTT (Publisher and Subscriber) • EtherNet/IP • Modbus TCP/IP * Included with use of Data Monitoring application

Software

Redundancy:	Routing between LAN and WAN, WAN Backup
Management:	Local Web UI for configuration, diagnostics and maintenance, Supports FTP/SFTP through Belden Horizon™ console
Diagnostics:	LEDs (Power, Link Status, Data, Status), Signal Contact (24 V DC/1 A), Log File, Syslog
Configuration:	Web Interface, Belden Horizon™ Console

Security:	Integrated Firewall Allowed IP List to prevent unwanted access Secure Socket Tunneling Protocol (SSTP, port 443) with single use credentials to create tunnels AES-256 bit encryption Activity Logs Additional IT-friendly security features when using Belden Horizon™ Console (formerly ProSoft Connect™, a secure, cloud-native platform for the Industrial Internet of Things): ● Virtual Lockout, Tagout (vLOTO™) – dynamic authorization for secure remote access ● Active Directory support via Single Sign On (SSO) with SAML 2.0 ● Email and Token based multi factor authentication ● Role based access for users and devices ● Configure password rules and enforcement policies ● Audit trail with auto-backup
Miscellaneous:	NTP Client and Server, DHCP Client, DNS Client
Routing:	Routing between LAN and WAN, WAN Backup, IP masquerading, 1-to-1 NAT, port forwarding, L2 bridging
Application Support and Management:	Docker Containers, Virtual Machines, App orchestration through Belden Horizon™ console

Ambient conditions

MTBF (Telecordia SR-332 Issue 3) @ 25°C:	387,288 hours
Operating temperature:	-40-+70 °C
Note:	cold start at -20°C
Storage/transport temperature:	-40-+85 °C
Relative humidity (non-condensing):	5-95 %

Mechanical construction

Dimensions (WxHxD):	160 mm x 186 mm x 65 mm
Weight:	1560 g
Housing Material:	Rugged high-strength sheet metal
Mounting:	DIN Rail 35 mm
Protection class:	IP40

EMC interference immunity

EN 61000-4-2 electrostatic discharge (ESD):	± 4 kV contact discharge; ± 8 kV air discharge
EN 61000-4-3 electromagnetic field:	10 V/m (80 MHz-1000 MHz); 3 V/m (1.4 GHz-6.0 GHz)
EN 61000-4-4 fast transients (burst):	2 kV power line, 1 kV data line
EN 61000-4-5 surge voltage:	power line: ± 1 kV (line/ground) and ± 0.5 kV (line/line); data line: ± 1 kV (line/ground)
EN 61000-4-6 Conducted Immunity:	10 V (150 kHz-80 MHz)

EMC emitted immunity

EN 55032:	EN 55022 Class A
FCC CFR47 Part 15:	FCC 47CFR Part 15, Class A

Approvals

Basis Standard:	CE, FCC
Safety of information technology equipment:	UL 62368-1
Substation:	EN 61850-3, IEEE 1613

Reliability

Guarantee:	60 months (please refer to the terms of guarantee for detailed information)

Scope of delivery and accessories

Scope of delivery:	1 × Device, 2 × DIN Rail Kit

Further Instructions

Product Documentation:	https://www.doc.hirschmann.com/index.html
Certificates:	https://www.doc.hirschmann.com/certificates.html

History

Update and Revision:	Revision Number: 0.36 Revision Date: 10-04-2023

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