


Product: [EAGLE40-6TX-EECC-HV-UN](#) 



Next-Generation, Industrial Train Firewall with Enhanced Cybersecurity Including Support for Intrusion Detection Systems (IDS) and Deep Packet Inspection (DPI)

Product Description

The Hirschmann EAGLE40-6M is a next-generation firewall designed for use on-board in railway rolling stock applications with six (6) 2.5-Gigabit Ethernet M12 X-coded ports, real-time traffic monitoring, advanced threat protection, and secure remote connectivity using IPSec VPN. Includes deep packet inspection (DPI) modules.

Technical Specifications

Product description

Part Number:	942300302
Port type and quantity:	6 x GbE X-coded M12 ports
Port Speed:	2.5 Gbit/s X-coded M12

Displays

LEDs:	Power Supply Status LED, Device Status LED, HDD Activity LED, Port Status LEDs
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More Interfaces

USB interface:	1 x USB 2.0/3.0, 5-pin A-coded M12
Serial Interface:	1 x Serial Console Port (4-pin, A-coded M12)
Power Supply:	1 x 5 pin K-coded M12

Hardware

CPU:	Intel® Core™ Apollo Lake-I x7-E3950 @ 1.6 GHz
Memory:	8GB DDR3
Storage:	64GB SSD

Power requirements

Operating Voltage:	Dual 24 V DC - 110 V DC
Power consumption:	25 W

Security features

Multipoint VPN:	IPSec, IKE v1/v2, 3DES, AES (-128, -192, -256), Pre-Shared Key (PSK), X.509v3 Certificates, MD5, SHA-1, NAT-T, Hub-and-Spoke
Deep Packet Inspection:	Unified Protection Suite (All Enforcers)
Stateful inspection firewall:	Firewall rules (incoming/outgoing, management)

Software

Redundancy:	VRRP (Virtual Router Redundancy Protocol), Tracking Framework for VRRP
Management:	SNMPv3, SSH2/SFTP/SCP, HTTPS, Serial CLI, SNMPv1/2, local and central User Management (RADIUS), HiDiscovery, Industrial HiVision, HiView, LLDP
Diagnostics:	LEDs (Power, Link Status, Data, Status), Log File, Syslog, Configuration check, RMON (statistics), Trap for changes and configuration saves
Configuration:	Command Line Interface (CLI), Web Interface, Auto-Configuration Adapter (ACA22), HiDiscovery, Industrial HiVision, HiView
Security:	DoS prevention, IPSec VPN, Audit trail, Role-based Access Control, Remote Authentication via RADIUS, IEEE 1686 compliant configuration possible, Firewall Learning Mode, Routed Firewall Mode and Transparent Firewall Mode for Layer 3 and Layer 2 packet filtering rules, Management VLAN, Ingress storm protection, Authentication using LDAP, Deep Packet Inspection (DPI) Enforcer Modules: Modbus TCP, OPC, EtherNet/IP, IEC104, DNP3, and AMP; Support for CylusOne IDS (Docker)
Miscellaneous:	NTP Client and Server, DHCP L3 Relay

Routing:	VLAN and port based routing, static routing, static multicast, IGMP query, multinetting, IP masquerading, 1-to-1 NAT, port forwarding, Static and Dynamic ARP entries, OSPFv2, Static route tracking
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Ambient conditions

MTBF (Telecordia SR-332 Issue 4) @ 25°C:	GB 25°C: 842,752 h / GB 75°C: 168,169 h
Operating temperature:	-40 –+70 °C
Storage temperature (up to 3 months):	-40 °C to +85 °C
Storage temperature (up to 1 year):	-40°C to +70 °C
Storage temperature (up to 2 years):	-40°C to +50 °C
Storage temperature (up to 10 years):	0°C to +30 °C
Protective paint on PCB:	Yes (conformal coating)

Mechanical construction

Dimensions (WxHxD):	305 x 83 x 180 (mm)
Weight:	4.2 kg
Housing Material:	Aluminum Extrusion Top cover, Others by using SGCC
Mounting:	Wall mounting
Protection class:	IP40

Approvals

Basis Standard:	CE, FCC
Safety of industrial control equipment:	UL 61010, EN 61131
Safety of information technology equipment:	IEC 62368-2
Railway norm:	EN 50155, EN 50121-4, EN 45545, EMV06

Reliability

Guarantee:	60 months (please refer to the terms of guarantee for detailed information)
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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: 0.22 Revision Date: 11-11-2024
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Variants

Item #	Type
942300302	EAGLE40-6TX-EECC-HV-UN

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