RESMLAC-12EMG-F35 - Enhanced Managed Ethernet switch, D38999 connectors - 12 Gigabit ports

Military ethernet switch for harsh environment - Fully MIL-STD compliant

NEW

Description

Amphenol's RESMLAC-12EMG-F35 is a MIL-STD rugged, Enhanced Managed-military-grade Gigabit Ethernet switch, offering 12 Gigabit Ethernet Ports.

Developed for harsh environment applications, the RESMLAC-12EMG-F35 features mechanical packaging enhancements designed for MIL-STD-810F airborne and ground environmental compliance and high reliability.

The unit has been especially hardened to improve ingress, impact, and shock/vibration protection, as well as eliminate all moving parts through passive cooling, and interface through sealed MIL-DTL-38999 Series III circular connectors.

Leveraging best-in-class switching technology, the RESMLAC-12EMG-F35 serves as a robust solution for providing local area network (LAN) connectivity to IP-enabled computing and net-centric devices. Compact in size, the RESMLAC-12MG-F35 is particularly useful for expanding port density to tactical IP routers in space-constrained airborne and ground vehicle environments.

The RESMLAC-12EMG-F35 is specifically designed for Data Acquisition & Transmission, Battlefield Communication C4ISR, Rugged Networks, Mobile Communications, Combat vehicles and Avionic & Shipboard Systems.

Main features

ETHERNET PORTS
- Enhanced Managed 12 x switched 10/100/1000 ports

NETWORKING
- Spanning Tree (802.1d), RSTP (802.1w) and multiple Spanning Tree (802.1S) for fast recovery rings
- Security via Radius Authentication 802.1x, Port Security, Port Mirroring
- Multicasting (IGMP Snooping), GARP, GMRP, and GVRP Broadcasting and flooding Control up to 8K Groups
- 802.1q Tagged based VLAN up to 4K VLAN groups
- QoS Multi-Layer Classifier, 802.1p, ToS/DSCP traffic classification. WFQ, Strict Queuing.
- Bridge support for Q-in-Q.
- ink Aggregation 802.3AD
- WEB, CLI, Telnet
- 3 static routing
- Rmirror
- Port Protection: 1+1 port protection, 1:1 port protection, 1:N port protection
- G.8032 ring protection
- DHCP option 82 relay
- L2CP tunneling
- Protocol-based VLAN
- 1588v2 PTP with two-step clock

CONNECTORS
- Power Connector Type: TV07 RW 11-35 P
- LAN Connector Type: TV07 RW CI 19-35 P
   • 12x ports spread among 2x connectors J2 & J3
- Serial Interface: Shared among J3 connector
- LED Indication Per Port (Speed, Link/Activity)

STANDARDS
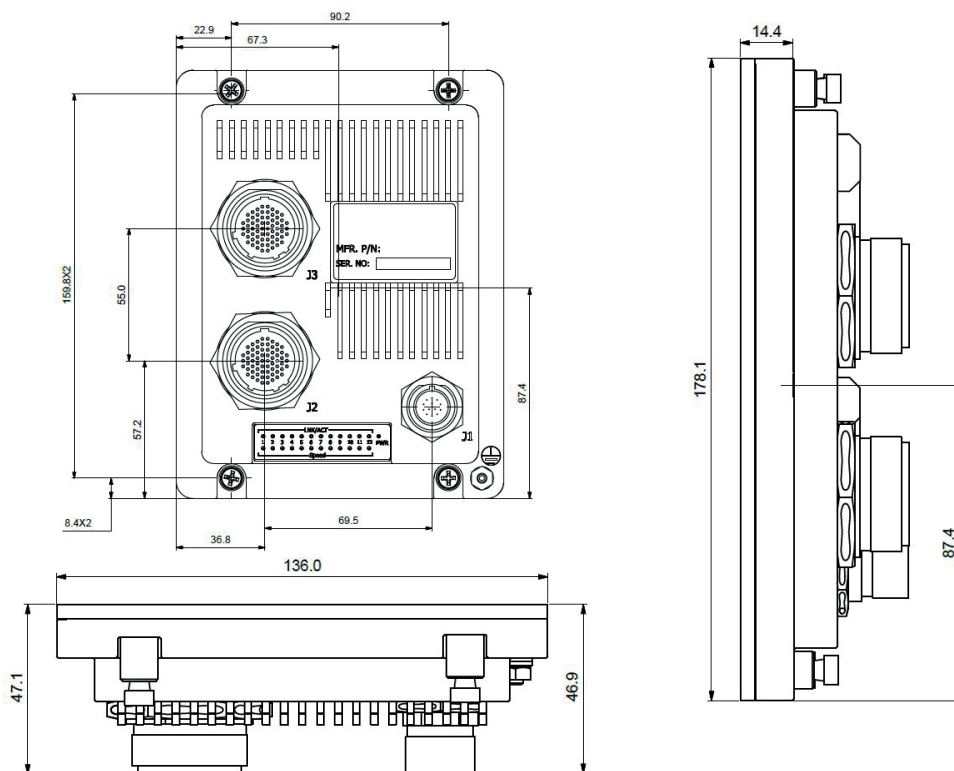- MIL-STD-1275, MIL-STD-704A, MIL-STD-461E
- MIL-STD-810F GM
- IP67

VOLTAGE OPERATION
- 24VDC (16VDC - 36VDC)

Amphenol SOCAPEX

Ethernet Switch & Media Converter

Military Ethernet Switch for Harsh Environment

Military Ethernet Switch for Harsh Environment with Industrial EMI Compliancy

RESMLAC-12EMG-F35 - Enhanced Managed Ethernet switch, D38999 connectors - 12 Gigabit ports

Product specifications

Chassis	• Low profile rugged aluminum extrusion • Conductively cooled w/custom internal heat-sinks • Ingress protection against sand, dust and moisture • Conductive internal finish per MIL-DTL-5541F • Polyurethane paint, per MIL-C-83286 type II green, matt texture
Performance	• 26.8 Mbps wire speed forwarding rate • 52 Gbps maximum forwarding bandwidth • 8K MAC Address
Standards compliance	• IEEE 802.1X MAC based Authentication • IEEE 802.1Q Vlan Tagging • IEEE 802.1P QoS • IEEE 802.1S Multiple STP • IEEE 802.1W Rapid STP • IEEE 802.3AD Link Aggregation
Power	• Exceed MIL-STD-1275B Surge and Spike protection • Voltage Input: 24Vdc Nominal (16-36 VDC) • Power Consomption: 7W Max • Chassis grounding
Electromagnetic	• MIL-STD-461E Electromagnetic compatibility • CE-102, CS-114, CS-115, CS-116, RE-102, RS-103
Shock / Vibration / Humidity	• MIL-STD-810F/G/GM: • Random vibration (514.5I), Bench Handling (516.6VI), High Temp. (501.5I,II), • Low Temp. (502.5I), Humidity (507.5II), Air Pressure (500.5I,II), • Blowing Rain (506.5I), Immersion (512.5I), Salt Atmosphere (509.5I), • Blowing Dust (510.5I), Loose Cargo Vibration (514.6II), Wind Analysis. • IP67
Physical	• Dimensions: 178mm (L) x 136(W) x 47(H), including connectors • Weight: 1150 g
Installation	• Set of Four #10-32UNF captive screws for mounting.
Temperature	• Operational temp.: -45ºC to +85ºC (-49ºF to +185ºF) – -45°C Cold Start-Up • Storage temp.: -45ºC to +85ºC (-49ºF to +185ºF)

Dimensional line drawing - All measurements are in millimeters

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RESMLAC-12EMG-F35 - Enhanced Managed Ethernet switch, D38999 connectors - 12 Gigabit ports

How to order

Part number	Description
Ethernet switches Part number	
RESMLAC-12EMG-F35-CD	MIL-STD Rugged Managed Ethernet switch with 8 ports 10/100/1000TX, M38999 connectors, cadmium plated connectors, powered with 16-36VDC
RESMLAC-12EMG-F35-ZN	MIL-STD Rugged Managed Ethernet switch with 8 ports 10/100/1000TX, M38999 connectors, Black Zinc Nickel plated connectors, powered with 16-36VDC ✓
RESMLAC-12EMG-F35-NI	MIL-STD Rugged Managed Ethernet switch with 8 ports 10/100/1000TX, M38999 connectors, Nickel plated connectors, powered with 16-36VDC ✓
Cable assemblies Part number	
RESMLAC-12EMG-F35-CBL-PWR-2M-B4	Power cordset for RESMLAC-12EMG-F35, 1 side with TV06RW1135S, 1 side with 4mm plugs for power supply, cable 2m long
RESMLAC-12EMG-F35-CBL-J2-RJ45-2M	8x LAN - J2 - cordset for RESMLAC-12EMG-F35, 1 side with TV06RW1935S, 1 side with 8x RJ45 civilian, cable RJFSFTP5E cat 5E, 2m long
RESMLAC-12EMG-F35-CBL-J3-RJ45-2M	4x LAN and MNG - J3 - cordset for RESMLAC-12EMG-F35, 1 side with TV06RW1935S, 1 side with 4x RJ45 civilian and 1 DB9, cable RJFSFTP5E cat 5E, 2m long

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