Military Ethernet Switch for Harsh Environment

RESMLAC-8MG-CAPS-POE - Managed Ethernet switch, D38999 conn. – 8 Gigabit PoE+ ports

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

Description

power budget of 330W.

Amphenol's RESMLAC-8MG-CAPS-POE is a MIL-STD rugged, Managed-militarygrade Ethernet switch, offering 8 Gigabit Ethernet Ports with up to 60W per port (PoE+ compliant per IEEE 802.3af Type 1 & 802.3at Type 2 & 802.3bt Type 3 « 4PPoE »). The switch provides a total PoE

Developed for harsh environment applications, the RESMLAC-8MG-CAPS-POE 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.

The RESMLAC-8MG-CAPS-POE is fully managed with advanced network features such as switching protocols, virtual LANS (VLANS), traffic prioritization, and bandwidth aggregation. The RESMLAC-8MG-CAPS-POE is is ideal for mobile Ethernet-equipped platforms, such as vetronics, ground vehicles and aerial applications where traditional power sources have limited availability and supports COTS guidelines for PoE-enabled cameras, WiFi access points, mesh nodes and other devices.

Main features

ETHERNET PORTS

- Managed 8x switched 10/100/1000 ports
- 4PPoE (60W per port), PoE+ (30W per port)

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
- 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.
- L3 static routing
- Link Aggregation 802.3AD.
- WEB, CLI, Telnet Management.
- Rmirror
- Port Protection: 1+1 port protection, 1:1 port protection, 1:N port protection
- G.8032 ring protection
- DHCP option 82 relay
- L2CP tunnelling
- Protocol-based VLAN
- 1588v2 PTP with two-step clock

CONNECTORS AND INDICATORS

- Power: TV07RW 1304 PN
- LAN: TV07WCI 9-9S
- Serial Interface: TV07WCI 9-9S
- LED Indication Per Port (Link/Activity, Speed, PoE)

ENVIRONMENTAL COMPLIANCE

- MIL-STD-1275, MIL-STD-704A, MIL-STD-461E
- MIL-STD-810F GM; IP68
- Operational temp.: -40°C to +85°C; -40°C Cold Start-Up
- Storage temp.: -45°C to +85°C

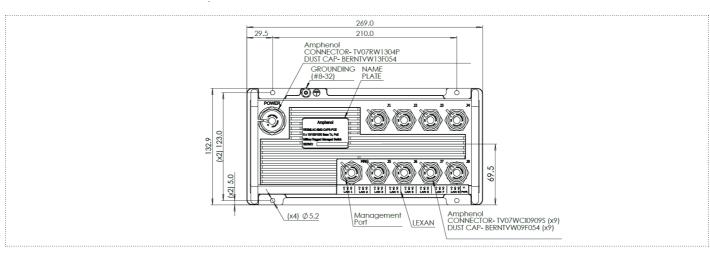
STANDARDS COMPLIANCE

- IEEE 802.3af, IEEE 802.3at, IEEE 802.3bt
- IEEE 802.1X Access control
- 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 802.1AD Link Aggregation

RESMLAC-8MG-CAPS-POE - Managed Ethernet switch, D38999 conn. – 8 Gigabit PoE+ ports

Product specifications

Chassis	 Low profile rugged machined aluminum Conductively cooled w/custom internal heat-sinks Ingress protection against sand, dust and moisture Polyurethane Paint, Per MIL-C-83286 type II, matt texture, color: Green FS24084
Performance	 8K MAC addresses 20 Gbps forwarding Bandwidth LED indication (Speed, Link/Activity) per port 26.8 Mbps Wire-Speed forwarding rate
Power	 Exceed MIL-STD-1275B & MIL-STD-704A Surge and Spike protection Voltage Input: 24Vdc Nominal (18-32 VDC) Power Consumption: 2,8W Typical (without PoE) Chassis grounding
Power over ethernet	 Total PoE Budget 330W Maximum Consumption per port 60W Dynamic Power Allocation PoE Priority per port Full compliance to IEEE 802.3af, IEEE 802.3at, IEEE 802.3bt No Power Degradation at +85°C Operates from Regular Military 24VDC; No need for additional PoE 48VDC Input Optional GUI/Web Application for PoE Management
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. IP68
Physical	 Dimensions: 269mm (L) x 133mm(W) x 71mm(H), including connectors Weight: 1,2 kg
Installation	 Set of Four holes 5,2mm for mounting to any flat surface. Carrying handles in option



Ordering information

Part Number	Description
RESMLAC-8MG-CAPS-POE	MIL-STD Rugged, Managed PoE+ Ethernet Switch, 8 x 10/100/1000TX, Delivered without handles
RESMLAC-8MG-POE-CBL-PWR-2M	Power cordset for RESMLAC-8MG-CAPS-POE, 1 side with TV06RW1304S, 1 side with 4mm plugs for power supply, cable 2m long
RESMLAC-8MG-POE-CBL-LAN-RJ45-2M	LAN cordset for RESMLAC-8MG-CAPS-POE, valid for LAN 1 to 8, 1 side with TV06RW0909P plug, 1 side with RJ45 civilian, cable RJFSFTP5E cat 5E, 2m long
RESMLAC-8MG-POE-CBL-MNG-2M	Management cable for RESMLAC-8MG-CAPS-POE, 1 side with TV06RW0909P plug, 1 side with DB9, 1,7m long