

# RJSMLAC-8MG-CAPS

## Managed military Ethernet switch, RJFTV connectors - 8 Gigabit ports

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

Amphenol's RJSMLAC-8MG-CAPS is a MIL-STD Fully managed Military-grade network switch offering 8 triple speed (10/100/1000) ports. Ethernet connectors are RJFTV, using RJField patented system that allows easy and quick assembly of any standard RJ45 cordset without any tool.

Developed for military and harsh environment applications, the RJSMLAC-8MG-CAPS 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 circular connectors.

Leveraging best-in-class switching technology, the RJSMLAC-8MG-CAPS serves as a robust solution for providing local area network (LAN) connectivity to IP-enabled computing and net-centric devices. Compact in size, the RJSMLAC-8MG-CAPS is particularly useful for expanding port density in space-constrained airborne and ground vehicle environments.

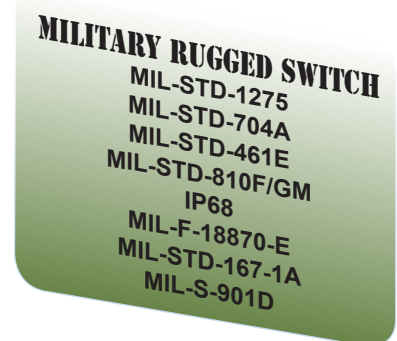
### Military applications

- Data acquisition & transmission
- Battlefield communication C4ISR
- Industrial Rugged Networks
- Mobile communications
- Combat vehicles
- Avionic & shipboard systems



### Key features

- **Ethernet ports**
  - Managed 8 x switched 10/100/1000 ports on RJFTV connectors
- **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.
  - Link aggregation 802.3AD.
  - WEB, CLI, Telnet management.
- **Connectors**
  - Power connector type: MIL-DTL-38999/24WA98PA
  - LAN connector type: RJFTV (coupling mechanism from MIL-DTL-38999)
  - Management connector type: SCE2B 76 A 06 07 SN 001
  - LED indication per port (Speed, Link/Activity)
- **Chassis**
  - Low profile rugged aluminium extrusion
  - Conductively cooled w/custom internal heat-sinks
  - Ingress protection against sand, dust and moisture
  - Epoxy-Polyamide Paint, Per MIL-C-83286, matt texture, color: Nato green
- **Standards**
  - MIL-STD-1275, MIL-STD-704A, MIL-STD-461E,
  - MIL-STD-810F GM, IP67/68



## Product specifications

### Voltage operation

- Standard model: 24VDC (18VDC ~ 32VDC)
- VAC model : 90-265 VAC / 47-65 Hz powered

### Performance

- 26.8 Mpps wire speed forwarding rate
- 20 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
- Power consumption: 2.8W typical
- Chassis grounding

### Electromagnetic

- MIL-STD-461E electromagnetic compatibility
- CE-102, CS-114, CS-115, CS-116, RE-102, RS-103

### Environmental : shock/vibration/humidity

- MIL-STD-810F, 501.4I, 501.4II, 502.4I, 502.4II, 507.4, 500.4II, 514, 516I, 516VI, 514.5, 512.4
- IP67/68
- MIL-F-18870-E, Temperature shock test 72 hours @ -55°C, Storage
- MIL-STD-167-1A Low frequencies Vibrations
- MIL-S-901D Lightweight shocks

### Physical

- Dimensions: 287mm(L) x 147(W) x 50(H), including connectors & hardware
- Weight: 1.8 kg

### Installation

- Set of four 4.5 mounting holes on bottom for mounting to any flat surface.
- Carrying handles

### Cooling

- No moving parts. Passive cooling.

### Operating temp

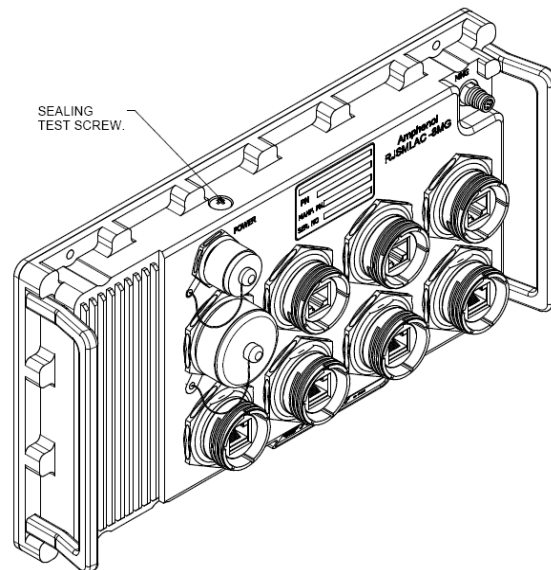
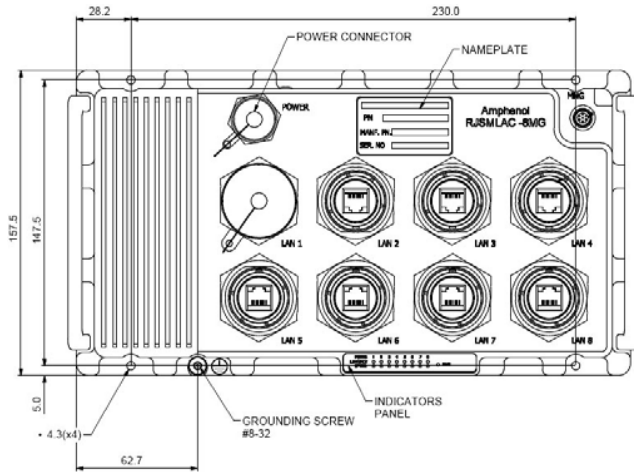
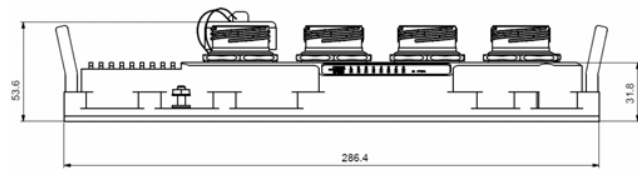
- -35°C to +75°C (-31°F to +167°F) / -35°C Cold start-up

### Storage temp

- -45°C to +85°C (-49°F to +185°F)

## Dimensional line drawing

All measurements are in millimeters



| Part number code       | Description                                                                                                               |
|------------------------|---------------------------------------------------------------------------------------------------------------------------|
| RJ5MLAC-8MG-CAPS       | MIL-STD Rugged Managed Ethernet switch with 8 ports 10/100/1000TX, powered with 18-32VDC                                  |
| RJ5MLAC-8MG-CAPS-VAC   | MIL-STD Rugged Managed Ethernet switch with 8 ports 10/100/1000TX, powered with 90-265 VAC / 47-65 Hz                     |
| RJ5MLAC-8MG-CBL-PWR-2M | Power cordset for RJ5MLAC-8MG-CAPS, 1 side with MIL-DTL-38999 plug, 1 side with 4mm plugs for power supply, cable 2m long |
| RJ5MLAC-8MG-CBL-LAN-2M | LAN cordset for RJ5MLAC-8MG-CAPS, 1 side with RJFTV6MG plug, 1 side with RJ45 civilian, cable RJFSFTP5E cat 5E, 2m long   |
| RJ5MLAC-8MG-CBL-MNG-2M | Management cordset for RJ5MLAC-8MG-CAPS, 1 side with SCE2BL1K0607PN plug, 1 side with DB-9 civilian, cable 2m long        |

► For specific cable harnesses, please consult us.