

RJSMLAC8MGCAPSVAC-NAV1

Managed military Ethernet switch, RJFTV connectors - 8 Gigabit ports
NAVY approved - Fully MIL-STD compliant



Description

Amphenol's RJSMLAC8MGCAPSVAC-NAV1 is a MIL-STD Fully managed Military-grade network switch offering 8 triple speed (10/100/1000) ports. This model has been tested and approved per NAVY MIL standard.

Designed to withstand the harshest naval or ground environment, the RJSMLAC8MGCAPSVAC-NAV1 features mechanical packaging enhancements. The unit has been especially hardened to improve water ingress, impact, and shock/vibration protection, as well as eliminate all moving parts through passive cooling. Ethernet connectors are MIL-DTL-38999 RJFTV, with RJField patented system that allows easy and quick assembly of any standard RJ45 cordset without any tool.

Leveraging best-in-class switching technology, the RJSMLAC8MGCAPSVAC-NAV1 serves as a robust solution for providing local area network (LAN) connectivity to IP-enabled computing and net-centric devices in space-constrained naval, and ground vehicle environments.

NAVY APPROVED

MIL-S-901D, Lightweight shock
MIL-STD-167-1A, Low frequencies vibrations
MIL-F-18870-E, Operating temperature

Main 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.
- L3 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 tunnelling*
- Protocol-based VLAN*
- 1588v2 PTP with two-step clock*

CONNECTORS

- Power connector type: MIL-DTL-38999/24WA98PA
- LAN connector type: RJFTV (coupling mechanism from MIL-DTL-38999)
- 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
- Polyurethane Paint, Per MIL-C-83286 type II, matt texture :
 - Color green FS24084

STANDARDS

- MIL-STD-1275, MIL-STD-704A, MIL-STD-461E/F
- MIL-STD-810F GM, IP67/68
- MIL-S-901D

VOLTAGE OPERATION

- 90-265VAC / 47-65Hz
- NOTE : DC model (18-32VDC) also available

Markets & Applications



Navy



Battlefield communication C4ISR
Data acquisition & transmission
Rugged Networks



Combat Vehicles



Avionic & shipboard systems

(*) new !

Product specifications

| | |
|--|--|
| Voltage operation | <ul style="list-style-type: none"> VAC model: 90-265 VAC / 47-65 Hz powered |
| Performance | <ul style="list-style-type: none"> 26.8 Mpps wire speed forwarding rate 20 Gbps maximum forwarding bandwidth 8K MAC address |
| Standards compliance | <ul style="list-style-type: none"> 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 | <ul style="list-style-type: none"> Exceed MIL-STD-1275B surge and spike protection Power consumption: 7W typical Chassis grounding |
| Electromagnetic | <ul style="list-style-type: none"> MIL-STD-461E electromagnetic compatibility CE102, CS114, CS115, CS116, RE102, RS103 MIL-STD-461F RE101, RS101 |
| Environmental : shock/vibration/ humidity | <ul style="list-style-type: none"> MIL-S-901D, Lightweight shock MIL-STD-167-1A, Low frequencies vibrations MIL-F-18870-E, Operating temperature MIL-STD-810F, 501.4I, 501.4II, 502.4I, 502.4II, 507.4, 500.4II, 514, 516I, 516VI, 514.5, 512.4 IP67/68 |
| Physical | <ul style="list-style-type: none"> Dimensions: 287mm(L) x 147(W) x 50(H), including connectors & hardware Weight: 1.8 kg |
| Installation | <ul style="list-style-type: none"> Set of four 4.5 mounting holes on bottom for mounting to any flat surface. Carrying handles |
| Cooling | <ul style="list-style-type: none"> No moving parts. Passive cooling. |
| Operating temp | <ul style="list-style-type: none"> -40°C to +70°C (-40°F to +158°F) / -35°C Cold start-up |
| Storage temp | <ul style="list-style-type: none"> -45°C to +85°C (-49°F to +185°F) |

Overall dimensions

| Part number | Description |
|------------------------------|--|
| RJSMLAC8MGCAPSVACNAV1 | <ul style="list-style-type: none"> MIL-STD rugged 8 x 10/100/1000TX with RJFTV Managed switch With caps and handles Dark green 90-265 VAC / 47-65 Hz powered |

Dimensional line drawing - All measurements are in millimeters