



RESMLAC-28MG

Managed military Ethernet switch - 24 Gigabit + 4 combo 10G ports

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

The RESMLAC-28MG is a MIL-STD Fully managed Military-grade network switch offering 24 triple speed (10/100/1000) ports + 4 x 10G fiber ports.

The RESMLAC-28MG is compatible with all the newest military industry network protocols for redundant link topology, security, multi-cast and management requirements.

Developed specifically for military and harsh mobile applications, the RESMLAC-28MG 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-D-38999 circular connectors and SCE.

Leveraging best-in-class switching technology, the RESMLAC-28MG serves as a robust COTS solution for providing local area network (LAN) connectivity to IP-enabled computing and net-centric devices. Compact in size, the RESMLAC-28MG is particularly useful for expanding port density to tactical IP routers in space-constrained airborne and ground vehicle environments.

Military applications

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



Features

Ethernet ports

- Managed 24 x switched 10/100/1000 ports (including 4 Combo ports) + 4x10Gbps Fiber ports - Total of 28 ports.
- The 4 Combo ports provide alternative 4 ports 100/1000Base-FX ports

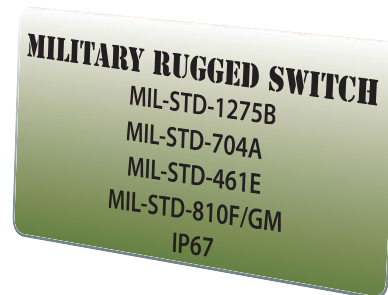
Networking

General

- Wire-speed hardware-based 28 ports gigabit ethernet switch
- Multicasting (IGMP Snooping), GARP, GMRP, MLD and GVRP
- Multicast groups up to 8K for both IPv4 and IPv6
- Broadcasting and flooding control up to 8K groups
- 802.1q tagged based VLAN up to 4K VLAN groups
- Link Aggregation 802.3ad, up to 16 members in group
- Link Aggregation mechanism based on L2/ L3/ L4 parameters
- Jumbo Frame support up to 10K
- WEB, CLI, Telnet Management

Quality of service

- QoS Multi-Layer Classifier: 802.1p, EtherType, VLAN-ID, IPv4/ 6 DSCP/ ToS, and UDP/TCP ports & ranges traffic classification
- Per port WFQ and Strict Queuing scheduling
- DSCP remarking for both IPv4 and IPv6 frames
- Ingress policer and ingress shaper per port with 500Kbps granularity
- Egress shaper per port with 500Kbps granularity
- Full-duplex flow control (IEEE802.3X) and half-duplex backpressure, symmetric and asymmetric.



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Security

- Security via Radius authentication 802.1x, Port/MAC access control
- Port security
- Per port ingress and egress port mirroring
- Mirroring per VLAN and per content awareness match
- Private VLAN support per VLAN (Isolated and Promiscuous ports)
- Content Aware Policers:
 - 128 Content Aware Policers
 - 16 Content Aware rate policers with rates from 1fps to 32 million fps
 - 8 UDP/TCP port range policers
 - Advanced ACL through hardware based match patterns
 - Content Aware Policers for generic MAC, ARP, IPv4, IPv6 protocols
 - No restriction on any mix of entries to Content Aware Policers
 - Content Aware Policers actions are permit/deny, police, count, snoop and mirror
 - Special support for IP fragments, UDP/TCP port ranges and ARP
 - Extensive CPU DoS prevention
 - Surveillance functions by Content Aware Policers counters
 - Multiple ACLs per port for optimal usage of Content Aware Policers
- Storm controllers for flooded broadcast, multicast and unicast

Redundancy and ring protection

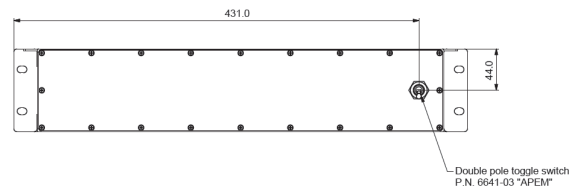
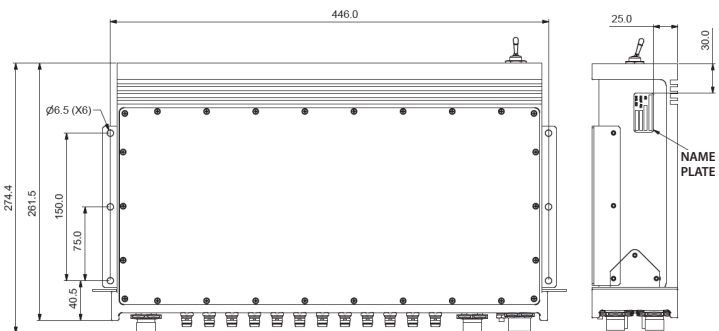
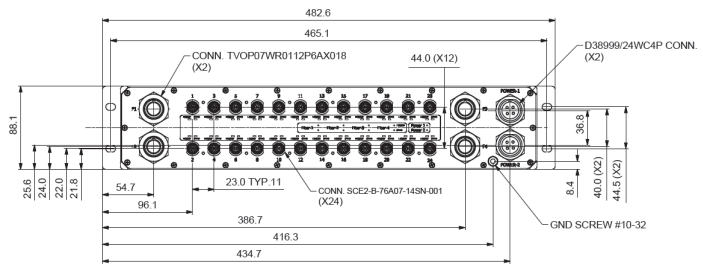
- Spanning tree (802.1d), RSTP (802.1w) and multiple Spanning tree (802.1s) for fast recovery rings
- RPR for up to 30 units per ring with recovery time <50ms hardware based
- RPR for up to 30 units per ring with recovery time <50ms hardware
- 20-Gbps bandwidth for ring topology
- QoS consistency across stack / ring
- Mirroring across stack / ring
- Link aggregation groups spanning multiple switches in stack/ring

Connectors

- 2 x Power connector type: MIL-DTL-38999/24WC4P (1 optional)
- 24 x LAN connector type: SCE2-B-76A07-14SN-001 (4 ports are Gigabit Combo ports - 10/100/1000 or 1000FX fiber)
- 4 x LAN Fiber connectors type: MIL-D-38999 TVOP
- 1 x Serial interface, shared with LAN port #1
- LED indication per Port (Speed, Link/Activity) per Unit (Power A, Power B)

Dimensional line drawing

All measurements are in millimeters



■ Chassis

- Low profile rugged aluminium extrusion
- Conductively cooled w/custom internal heat-sinks
- Ingress protection against sand, dust and moisture
- Anodize coating, MIL-A-8625, Type II, Class 2

■ Standards

- MIL-STD-1275B, MIL-STD-704A, MIL-STD-461E, MIL-STD-810F GM, IP67
- Support up to 50ms holdup time, and 6VDC drops

■ Voltage operation

- Redundant with load sharing Power Supplies 24VDC, 48VDC, or 90~230VAC

■ Performance

- 96.8 Mbps wire speed forwarding rate
- 56 Gbps maximum forwarding bandwidth
- 8K MAC address

■ Power

- Exceed MIL-STD-1275B and MIL-STD-704A Surge and Spike protection with 50ms holdup time and 6VDC drops
- Voltage input: 24Vdc nominal (18-32V), option for redundant Power supply, 48VDC, and 90~230VAC
- Power consumption: 20W typical
- 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, 501.4I, 501.4II, 502.4I, 502.4II, 507.4, 500.4II, 514, 516I, 516VI, 514.5, 512.4

■ Physical

- Dimensions: 440mm (L) x 200mm (W) x 88(H), including connectors & hardware, 2U, 19" rack
- Weight: 5.6 kg

■ Installation

- Set of four 4.5mm mounting holes on bottom for mounting to any flat surface
- 19" standard mounting ears

■ 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)

Part number	Description
RESMLAC 28MG	• Managed military grade Gigabit switch
Options	→ 24 x 10/100/1000TX Consult us for options such as additional ports 4 x Up to 10G Fiber ports

► [For accessories, please consult us.](#)