



RES8-12

VEHICLE ELECTRONICS

Rugged Ethernet Switch – RES

The Rugged Ethernet Switch RES is a compact, high performance Ethernet switch platform designed for use in military combat vehicles. The unit can be configured with up to twelve GbE ports. Up to eight ports can be configured with power out. The RES is designed to comply with contemporary standards such as DEF STAN 23-09 GVA and STANAG 4754 NGVA.

The unit is a fully managed Layer 2+ Ethernet switch with powerful carrier networking software and several software options

SAAB is able to meet specific customer needs for highly specialized products and services in a number of technical areas. Our rugged vehicle computer- and video- systems are designed to provide high levels of performance and reliability in the toughest environments. Whether your need is minimum space or maximum capability, we can provide a system to meet your specific application.



Rear View



Front View

Main design features

The RES is a compact, high performance Ethernet switch designed for applications where space is limited such as military vehicles and vessels.

- Flexible configuration
- Fully rugged
- MIL-C-38999 connectors
- Compact design
- Climatically sealed housing, IP65

- High performance
- Designed for compliance to GVA & NGVA standards
- Qualified according to: MIL-STD-810, MIL-STD-461 and MIL -STD-1275

Dimensions

Height	58,5 mm
Width	242 mm
Depth	144 mm
Weight	2,0 kg (approx.)

Miscellaneous

Power consumption: nom. 12-20 W

Configuration

Switch functions

- L2+ managed switching
- VLAN (802.11Q and port based)
- Multicast (IGMP snooping)
- Per-port data rate policer
- Flexible link aggregation
- STP/RSTP (IEEE 802.1w)
- SNMP v1/v2c/v3
- Port mirroring
- Quality of Service
- IGMP filtering
- Web & CLI administration
- Management via SSH
- Internal status supervisory & log

- Up to 12 10/100/1000BaseT(x) ports

Power input

- According to MIL-STD-1275
- Reverse voltage protection
- RS232 administration

Options

Switch function options

- L3 switching
- DHCP opt 82
- uPnP
- DHCP server acc. to RFC2131
- Advanced security options
- Power input according to DEF STAN 61-5 Part6 Issue 6
- IEEE-1588v2

Power output option

- Up to 8 power outputs
- Up to 2 x 5A per connector
- Up to 20A total output
- Over voltage, over current and short-circuit protection

External connectors

The RES includes nine connectors, type MIL-C-38999 series 3.

- **X1:** Power input, ID-pins & serial console
- **X2-X6:** 2 x 1GbE ports/connector
- **X3-X5:** Optional 4 x 1GbE ports/connector
- **X3-X6:** Optional power out, 2 ports/connector

Mechanical interface

The RES units are assumed to be fixed mounted in the vehicle. External damping devices are not required.

Environmental

- Operating temperature: -40°C to +70°C
- Storage temperature: -46°C to +70°C

Specifications subject to change without notice

