

Military Ethernet Switch for harsh environment Fully MIL-STD compliant

RES-SCE-AC-8US: Unmanaged Miniature Portable Ethernet Switch - 8 Fast ports

Amphenol's RES-SCE-AC-8US is a MIL-STD rugged, Unmanaged-military-grade Ethernet switch, offering 8 Fast Ethernet 10/100 Ports. The Portable Rugged Ethernet Switch is intended for Command Post Man Packable.

Developed for mobile portable military and harsh environment applications, the RES-SCE-AC-8US 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-SCE circular connectors.

Leveraging best-in-class switching technology, the RES-SCE-AC-8US serves as a robust solution for providing local area network (LAN) connectivity to IP-enabled computing and net-centric devices. Compact in size, the RES-SCE-AC-8US is particularly useful for expanding port density 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



Key Features

- **Ethernet Ports**
 - 8 x switched 10/100 (Fast Ethernet) ports
- **Networking**
 - Full wire-speed forwarding rate
 - Store-and-forward mechanism
 - Auto MDI-II, MDI-X
 - Auto-negotiation protocol
 - Address look-up
- **Connectors**
 - Power + LAN connector : SCE2-B-76A06-07SN-001
- **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-461E, MIL-STD-810F/G/GM, IP68
- **Voltage operation**
 - 5VDC (USB) INPUT, shared with LAN Port Number 1



Product specifications

Performance

- 128K byte of SRAM for frame buffering
- 2.0 Gbps high-performance memory bandwidth
- LED indication (speed, link/activity) per port - Optional
- Wire-speed reception and transmission
- Integrated address look-up engine
- Automatic address learning

Standards compliance

- IEEE 802.3 10 Mbps 10BASE-T (Ethernet)
- IEEE 802.3u 100BASE-TX 100 Mbps (Fast Ethernet)
- IEEE 802.3x flow control

Power

- Voltage input: 5Vdc nominal - Optional USB sourcing
- Power consumption: 2W typical
- Chassis grounding

Electromagnetic

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

Environmental

- 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: 82.2mm (L) x 61.4 (W) x 26 (H), Not including connectors Dust Caps.
- Weight: 140g - Not including dust caps

Installation

- Portable, flat for mounting to any flat surface.

Cooling

- No moving parts. Passive cooling.

Operating temp

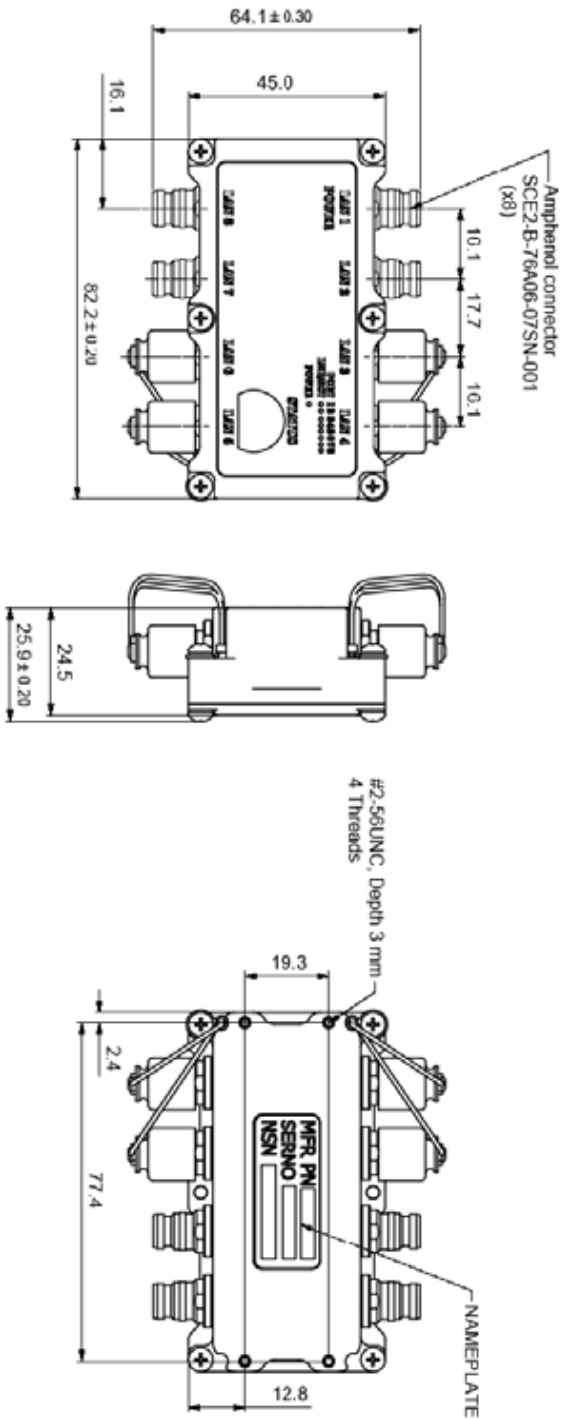
- -35°C to +75°C (-31°F to +167°F) - Cold start-up

Storage temp

- -45°C to +85°C (-49°F to +185°F)

Dimensional Line Drawing

All measurements are in millimeters



Part number	Description	
	RES-SCE-AC-8US	• RES-SCE-AC-8US • MIL-STD Rugged • 8 x 10/100TX • Unmanaged switch
	RES-SCE-CBL-1M50	• Starter cable set for MILTECH-308 • MIL-SCE to RJ-45 connectors • 1m50 (5 feet) length (Data or Data+Power)