RES-SCE-AC-8US - Unmanaged miniature portable Ethernet switch - 8 fast ports

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

Description

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 unmanned vehicles or man packable command post.

Developed for SWaP (Size Weight and Power) and mobile portable military 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 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.

Main 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
- Polyurethane Paint, Per MIL-C-83286 type II, matt texture, color:
  - Nato green FS24079

STANDARDS
- MIL-STD-461E, MIL-STD-810F/G/GM, IP67/68

VOLTAGE OPERATION
- 5VDC (USB) input, shared with LAN Port Number 1

ACTIVITY STATUS
- Indicators for Power and LAN activity (light off by default)
- STATUS pushbutton to turn on the indicators

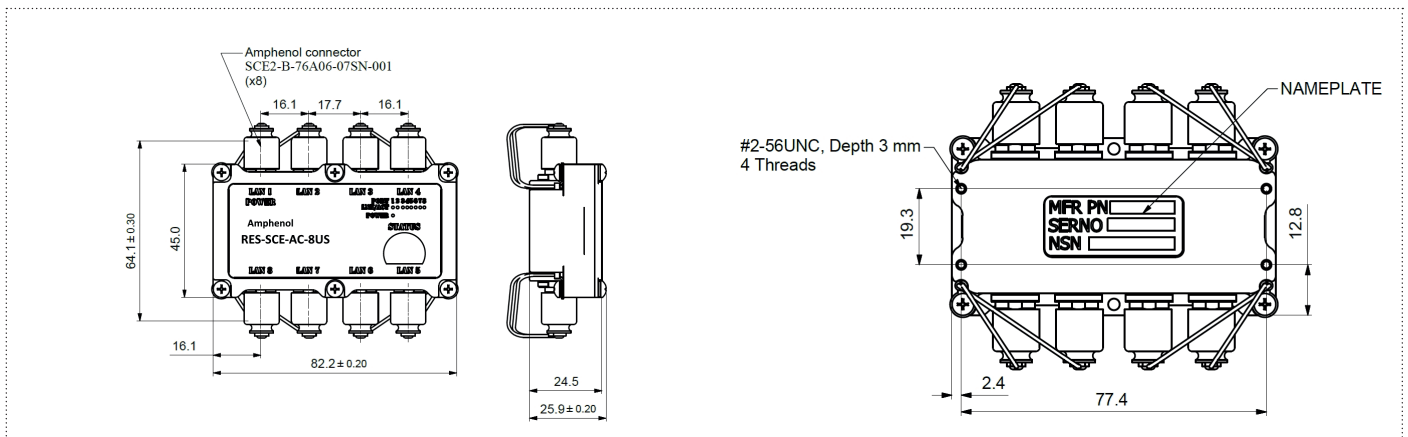**MILITARY RUGGED SWITCH**
MIL-STD-461E
MIL-STD-810F/G/GM
IP68

Amphenol SOCAPEX

RES-SCE-AC-8US - Unmanaged miniature portable Ethernet switch - 8 fast ports

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: shock/vibration/ humidity	• 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 • IP67/68
Physical	• Dimensions: 82.2mm (L) x 64.1 (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) / -35°C Cold start-up
Storage temp	• -45°C to +85°C (-49°F to +185°F)

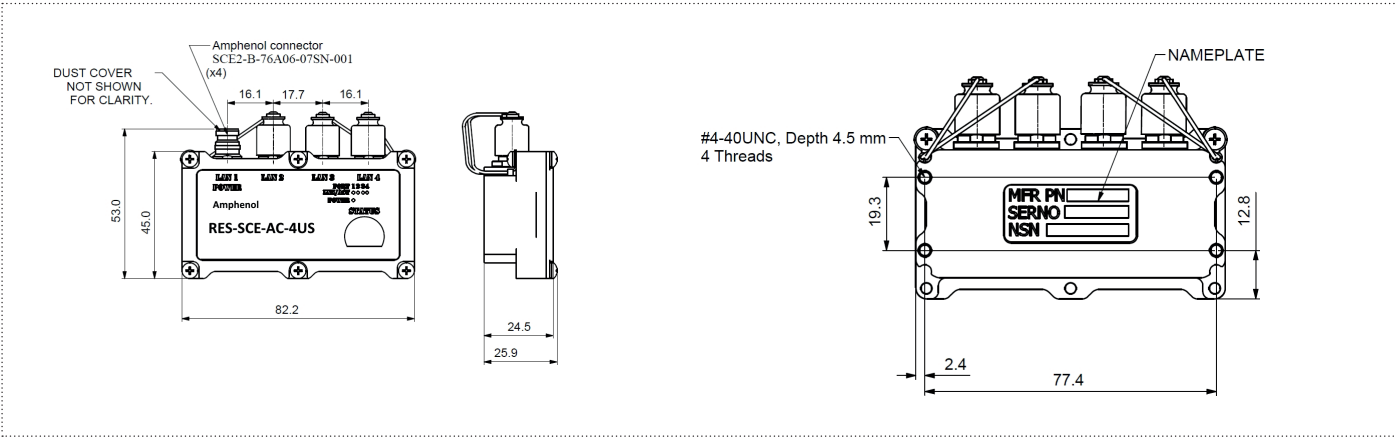## Overall dimension

Dimensional Line drawing for 8 ports models

Dimensional line drawing - All measurements are in millimeters

Amphenol SOCAPEX

RES-SCE-AC-8US - Unmanaged miniature portable Ethernet switch - 8 fast ports

Overall dimension

Dimensional Line drawing for 4 ports models

How to order

Part number	Description
Ethernet switches Part number	
RES-SCE-AC-8US	MIL-STD Portable Unmanaged Ethernet switch with 8 ports 10/100TX, Nato green color, with attached rubber caps ✓
RES-SCE-AC-4US	MIL-STD Portable Unmanaged Ethernet switch with 4 ports 10/100TX, Nato green color, with attached rubber caps ✓
Cable assemblies Part number	
RES-SCE-CBL-SCEL1K-PWR-3M	Power cordset for RES-SCE-AC-8US, 1 side with SCE2B-L1K-0607-PN Latch release, 1 side with 1 USB civilian for power supply, cable 3m long ✓
RES-SCE-CBL-SCEL1K-RJ45-1M5	LAN cordset for RES-SCE-AC-8US, valid for LAN 2 to 8, 1 side with SCE2B-L1K-0607-PN Latch release, 1 side with RJ45 civilian, cable RJFSFTP5E cat 5E, 1m50 long ✓
RES-SCE-CBL-SCEL1K-RJ45-3M	LAN cordset for RES-SCE-AC-8US, valid for LAN 2 to 8, 1 side with SCE2B-L1K-0607-PN Latch release, 1 side with RJ45 civilian, cable RJFSFTP5E cat 5E, 3m long ✓

For specific cable harnesses, please consult us.

Amphenol SOCAPEX