19"/2® ESW2205

24-p Switch

The 24-port Switch gives you twentyfour (24) Ethernet ports in a compact form factor. This switch conforms to both IEEE802.3i and IEEE802.3u standards for smooth integration with other devices. With an IP65 rated rugged case that protects against rain and dust, you can count on long-term performance in any environment.

Small form factor

The MilDef 19"/2® form factor is optimized for reduced size, weight, and power (SWaP) to meet industry and military requirements without sacrificing reliability, ruggedness or performance.

Flexible mounting

The 19"/2® standard enables flexible mounting options for a wide array of integration scenarios. The unit can be mounted in a standard 19" rack, half racks, or directly on to a surface and at any angle.

Military-relevant rugged design

MilDef products are designed to operate in extreme environmental conditions and challenging electromagnetic operational scenarios. Operationally proven, MilDef products are actively employed in military operations in over 60 countries.

Guaranteed performance

MilDef products are designed for the long lifecycles of military programs and come with a lifetime support program to ensure your equipment maintains peak performance for many missions to come.

We also guarantee the availability of spare parts for an additional 5 years after product end-of-life.

Features

- Based on Cisco ESS 3300
- 24 Ethernet copper ports
- LED indicators
- Rugged connectors
- Passively cooled

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Connector Interfaces

DC IN (front)	• 1x Power
SERVICE (back)	• 1x RS232 Service
X2-X4 (front)	3 connectors which each has: • 4x ETH 1000BASE-T
X5-X7 (back)	3 connectors which each has: • 4x ETH 1000BASE-T
X9 (front)	• 1x Serial Console

Other Interfaces

12x LAN indicator (back)

12x LAN indicator (front)

1x System button (front)

Technical Specification

Blanking	Enable/disable all externally visible indicators from emitting light via the "blanking command"
Design	Based on the Cisco ESS 3300
Factory reset	Factory reset by pressing the system button for 12 sec
LAN 1000BASE-T	1000BASE-T standard
LAN POE compatibility	Type 1 (PoE) and 802.3at Type 2 (PoE+) Mode A PoE available when powered > 18 VDC, 120 W available
Switch features	Management via SNMP, Command Line (Telnet, SSH) and Web IEEE 802.1, 802.3 standard VLAN IDs 256 IGMP Groups 1K ACL (PACL, VACL) EtherChannel IPv6 SNMP VTP v2, v3 802.1x multidomain authentication MIB SNMP v3 IGMP v1, v2, v3 NTP, PTP* *not on Te1/1 and Te1/2 ports
MIL-STD-1275D	5.3.2.2 5.3.2.3 5.3.2.4
Polarity protection	Protected against incorrect polarity connection on the power input within the normal operating voltage range
Power consumption	150 W when powered in the range 18-36 VDC (PoE available) 30 W when powered in the range 12-18 VDC (PoE not available)
Power input	12-36 VDC
Chassis material	Aluminum
Coating and color	Dupont AE0305-6603120 (RAL6031)
Cooling	Passively cooled
Dimensions depth	351 mm (13.8 in) (D)
Dimensions width and height	220 x 43.4 mm (8.66 x 1.71 in) (WxH)
Earth point	M6 12 mm
Surface treatment chassis	Chromit-Al
Weight	3.6 kg (8 lbs)
MTBF	138,000 h
CE	Compliant

Environmental Specification

Functional shock - Operating	MIL-STD-810G, Method 516.6, Procedure I - Functional Shock. Table 516.6-II, Terminal peak sawtooth pulse, Ground equipment 40 g 11 ms
High temperature - Operating	MIL-STD-810G, method 501.5, Procedure II - Operation 65 °C (149 °F)
High temperature - Operating (Optional)	MIL-STD-810G, method 501.5, Procedure II - Operation 71 °C (160 °F)
High temperature - Storage	MIL-STD-810G, Method 501.5, Procedure I - Storage 71 °C (160 °F)
Humidity	MIL-STD-810G, Method 507.5, Procedure II - Aggravated 95 ± 4 % RH Ten 24 h cycles
IP Class (Solid Particle Protection)	IP Class 6X
IP Class (Water)	IP Class X7
Low air pressure - Rapid decompression	MIL-STD-810G, Method 500.5, Procedure III - Rapid decompression 75.2 kPa, corresponding to 2,438 m (8,000 ft) 17 kPa, corresponding to 12,192 m (40,000 ft)
Low air pressure - Operating	MIL-STD-810G, method 500.5, Procedure II - Operation/Air Carriage 4,572 m (15,000 ft)

Low temperature - Operating	MIL-STD-810G, method 502.5, Procedure II - Operation -40 °C (-40 °F)
Low temperature - Storage	MIL-STD-810G, method 502.5, Procedure I - Storage -40 °C (-40 °F)
Noise level	Maximum noise level of 40 dB SPL A-weighting at 1 m (3.3 ft) distance
Salt fog	MIL-STD-810G Method: 509.5 5 % ± 1 % (by weight) Two cycles, 24 h wet + 24 h dry / cycle
Temperature shock - Operating	MIL-STD 810G, method 503.5 procedures I - C, - Multi-cycle shocks from constant extreme temperature 55 °C (131 °F) -40 °C (-40 °F)
Vibration - Helicopter	MIL-STD-810G. Method 514.6, Procedure I - General vibration, Category 14 - Rotary wing aircraft - helicopter
Vibration - Loose cargo	MIL-STD-810G. Method 514.6, Procedure II - Loose cargo transportation, Category 5 - Truck/trailer - loose cargo
Vibration - Tracked vehicles	MIL-STD-810G. Method: 514.6 , Procedure 1 - General Vibration, Category 20 - Ground vehicles - ground mobile, tracked vehicles
Vibration - Wheeled vehicles	MIL-STD-810G. Method: 514.6 , Procedure 1 - General Vibration, Category 20 - Ground vehicles - ground mobile, wheeled vehicles

EMC Specification

EMI conducted CE102	MIL-STD-461F, Method CE102, Conducted emissions, power leads BASIC CURVE 10 kHz - 10 MHz
EMI radiated RE102	MIL-STD-461F, Method RE102, Radiated emissions, electric field Navy Mobile & Army 2 MHz - 18 GHz
EMS conducted CS101	MIL-STD-461F, Method CS101, Conducted susceptibility, power leads CURVE #1 30 Hz - 150 kHz
EMS conducted CS114	MIL-STD-461F, Method CS114, Conducted bulk susceptibility Army, Ground 10 kHz - 200 MHz
EMS conducted CS115	MIL-STD-461F, Method CS115, Conducted susceptibility, bulk cable injection, impulse excitation
EMS conducted CS116	MIL-STD-461F, Method CS116, Conducted susceptibility, damped sinusoidal transients, cables and power leads 10 kHz - 100 MHz
EMS radiated RS103	MIL-STD-461F, Method RS103, Radiated susceptibility, electric field Army 2 MHz - 1 GHz