

19inch2 Cisco Switch ESW2104



19inch2 12-p Cisco based Switch

The 19"/2 12-p Switch gives you twelve Ethernet ports in a compact form factor. The switch conforms to the IEEE802.3i and IEEE802.3u standards for smooth integration with other devices. With a rugged case that has a protection rating of IP65 against rain and dust, you can count on long-term performance in any environment.

Built to take a beating

The Switch is built to withstand the harshest conditions over the long haul. It features aluminium casing, rugged MIL connectors for easy integration and will operate down to -40 C.

Guaranteed performance

Our products always come with a lifetime support to ensure your equipment maintains peak performance for many missions to come. We also serve units and stock spare parts for 5 years end-of-life.

Concept

A MilDef concept describes a possible implementation of customer specific requirements. Realization might involve NRE cost.

Features

- Passively cooled

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Connector Interfaces

X5 DC IN (front)	• 1x Power
X1 - X3 (front)	3 connectors which each has: <ul style="list-style-type: none"> • 4x ETH 1000BASE-T
SERVICE (back)	• 1x RS232 Service
X4 (front)	• 1x Serial Console

Other Interfaces

12x Indicator (front)
1x System Button (front)

Technical Specification

Blanking	Double-pressing the System button
ETH POE power delivery	802.3af, Class3
LAN 1000BASE-T	1000BASE-T standard
LAN POE compatibility	Type 1 (PoE) and 802.3at Type 2 (PoE+)
LAN PoE powered	Power over Ethernet (802.3af, Class3)
MIL-STD-1275D	5.3.2.2 5.3.2.3 5.3.2.4
Polarity protection	Protected against polarization failure on the power input in the voltage range of normal operation.
Power consumption	180W
Power input	12-32 VDC
Coating and color	Dupont AE0305-6603120 (RAL6031)
Cooling	Passively cooled
Dimensions	220x44x400 mm (WxHxD)
Earth point	M6 12mm
Surface treatment chassis	Chromit-Al
Weight	4 kg (8,9 lbs)
MTBF	Greater than 25000 h

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 40g 11 ms
High temperature - Operating	MIL-STD-810G, Method 501.5, Procedure II - Operation 55 °C (131 °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-hour cycles
IP Class (Solid Particle Protection)	IP Class 6X
IP Class (Water)	IP Class X5
Low air pressure - Rapid Decompression	MIL-STD-810G, Method 500.5, Procedure III - Rapid Decompression 75.2kPa, corresponding to 2,438m (8.000 ft) 17kPa, corresponding to 12192m (40.000 ft)
Low air pressure - Operating	MIL-STD-810G, method 500.5, Procedure II - Operation/Air Carriage 4572m (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 40dB SPL A-weighting @ 1m (3,3 ft) distance
Salt fog	MIL-STD-810G Method: 509.5 5% +- 1% (by weight) Two cycles, 24h wet + 24h 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)
Transit drop, in shipping package	MIL-STD-810G, method 516.6, Procedure IV - Transit Drop. Table 516.6-VI, Transit drop test, < 45.4 kg (100 lbs), < 91 cm (36 inch), Manpacked or man-portable
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

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Vibration - Wheeled Vehicle MIL-STD-810G, Method: 514.6 ,
Procedure 1 - General Vibration,
Category 20 - Ground vehicles -
ground mobile, wheeled vehicles

EMC Specification

CE EMI	EN61000-6-3:2007
CE EMS	EN55032:2015
EMI conducted CE102	MIL-STD-461F, Method CE102 BASIC CURVE 10kHz to 10MHz
EMI radiated RE102	MIL-STD-461F 2MHz - 18Ghz Navy Mobile & Army
EMS conducted CS101	MIL-STD-461F, Method CS101, conducted susceptibility, power leads CURVE #1 30Hz to 150kHz
EMS conducted CS114	MIL-STD-461F 10kHz - 200MHz Army, Ground
EMS conducted CS115	MIL-STD-461F Conducted susceptibility, bulk cable injection, impulse excitation
EMS conducted CS116	MIL-STD-461F 10 kHz to 100 MHz
EMS radiated RS103	MIL-STD-461F 2MHz to 1GHz Army
ESD	EN61000-4-2:2009 Level 3 EN50024:1998 Performance criteria B + A1:2001 + A2:2003