

# 19inch2 9p Cisco Switch ESW9221



## 19"/2 ESW9221

### 19"/2 Cisco fiber switch

The 19"/2 9-p Switch gives you nine fiber ports and a Cisco CLI. 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 Server 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.

### Features

- Cisco IE-4000 Switch Architecture
- 10-32 VDC

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## Connector Interfaces

|                               |   |
|-------------------------------|---|
| <b>SERVICE</b> (back)         | • 1x RS232 Service  |
| <b>X1, X2, X3, X4</b> (front) | 4 connectors which each has: <ul style="list-style-type: none"> <li>• 2x ETH 1000BASE-SX</li> </ul> |
| <b>X5</b> (front)             | • 1x ETH 1000BASE-SX  |
| <b>X6</b> (front)             | • 1x Console RS232  |
| <b>X7 DC IN</b> (front)       | • 1x Power  |

## Other Interfaces

|                          |
|--------------------------|
| 9x Indicator (front)     |
| 1x System Button (front) |

## Technical Specification

|                                    |   |
|------------------------------------|---|
| <b>LAN 1000BASE-SX</b>             | 1000BASE-SX standard with MM 850nm fiber  |
| <b>Switch Architecture</b>         | Cisco IE-4000 Switch Architecture   |
| <b>MIL-STD-1275D</b>               | 5.3.2.1<br>5.3.2.2<br>5.3.2.3<br>5.3.2.4  |
| <b>Polarity protection</b>         | Protected against polarization failure on the power input in the voltage range of normal operation. |
| <b>Power consumption</b>           | 100W  |
| <b>Power input</b>                 | 10-32 VDC   |
| <b>Coating and color</b>           | Dupont AE0305-6603120 (RAL6031)   |
| <b>Cooling</b>                     | Passively cooled  |
| <b>Dimensions Width and Height</b> | 220x88mm (WxH)  |
| <b>Earth point</b>                 | M6 12mm   |
| <b>Rack Mounting depth</b>         | 400mm   |
| <b>Surface treatment chassis</b>   | Chromit-Al  |
| <b>Weight</b>                      | 7 kg  |

## Environmental Specification (\*designed to meet)

|                                      |  |
|--------------------------------------|--|
| <b>Functional shock, operating*</b>  | MIL-STD-810G, Method 516.6, Procedure I - Functional Shock. Table 516.6-II, Terminal peak sawtooth pulse, Ground equipment |
| <b>Fungus*</b>                       | MIL-STD-810G, Method 508.6, Fungus   |
| <b>High temperature - Operating*</b> | MIL-STD-810G, method 501.5, Procedure II - Operation 55 °C   |
| <b>High temperature - Storage*</b>   | MIL-STD-810G, method 501.5, Procedure I - Storage 71 °C  |
| <b>Humidity*</b>                     | MIL-STD-810G, Method 507.5, Procedure II - Aggravated  |

95 ± 4 %rh

|  |   |
|--|---|
| <b>IP Class (Solid Particle Protection)*</b>   | IP Class 6X   |
| <b>IP Class (Water)*</b>                       | IP Class X5   |
| <b>Low air pressure - Rapid Decompression*</b> | MIL-STD-810G, Method 500.5, Procedure III - Rapid Decompression   |
| <b>Low air pressure - operating*</b>           | MIL-STD-810G, method 500.5, Procedure II - Operation/Air Carriage 4572m (15.000 ft)   |
| <b>Low temperature - Operational*</b>          | MIL-STD-810G, method 502.5, Procedure II - Operation -20 C  |
| <b>Low temperature - Storage*</b>              | MIL-STD-810G, method 502.5, Procedure I - Storage -40 C   |
| <b>Noise level*</b>                            | Maximum noise level of 40dB SPL A-weighting @ 1m distance   |
| <b>Salt fog*</b>                               | MIL-STD-810G Method: 509.5  |
| <b>Transit drop, in shipping package*</b>      | MIL-STD-810G, method 516.6, Procedure IV - Transit Drop. Table 516.6-VI, Transit drop test, < 45.4 kg, < 91 cm, Manpacked or man-portable |
| <b>Vibration - Helicopter*</b>                 | MIL-STD-810G, Method 514.6, Procedure I - General vibration, Category 14 - Rotary wing aircraft - helicopter                              |
| <b>Vibration - Loose Cargo*</b>                | MIL-STD-810G, Method 514.6, Procedure II - Loose cargo transportation, Category 5 - Truck/trailer - loose cargo                           |
| <b>Vibration - Tracked vehicles*</b>           | MIL-STD-810G, Method: 514.6 , Procedure 1 - General Vibration, Category 20 - Ground vehicles - ground mobile, tracked vehicles            |
| <b>Vibration - Wheeled Vehicle*</b>            | MIL-STD-810G, Method: 514.6 , Procedure 1 - General Vibration, Category 20 - Ground vehicles - ground mobile, wheeled vehicles            |

## EMC Specification (\*designed to meet)

|                             |   |
|-----------------------------|---|
| <b>CE EMC*</b>              | EMC Directive 2004/108/EC.                            |
| <b>EMI conducted CE102*</b> | MIL-STD-461F, Method CE102 BASIC CURVE 10kHz to 10MHz |
| <b>EMI radiated RE102*</b>  | MIL-STD-461F 2MHz - 18Ghz Navy Mobile & Army          |
| <b>EMS conducted CS114*</b> | MIL-STD-461F 10kHz - 200MHz Army, Ground              |
| <b>EMS conducted CS115*</b> | MIL-STD-461F  |

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|                             |  |
|-----------------------------|--|
| <b>EMS conducted CS116*</b> | MIL-STD-461F<br>10 kHz to 100 MHz  |
| <b>EMS radiated RS103*</b>  | MIL-STD-461F<br>2MHz to 1GHz<br>Army   |
| <b>ESD*</b>                 | EN61000-4-2:2009 Level 3<br>EN50024:1998 Performance criteria<br>B + A1:2001 + A2:2003 |