

# 19inch Fiber switch 2020 ESW9111



## Rugged fiber switch in a 19inch form factor

The 19" ESW9111 is a powerful switch customized for its demanding environment, smaller than standard rugged switches. This significantly reduces the switch's weight, energy consumption and heat production.

### Mounting

The 19" standard enables flexible mounting with customized brackets. The unit can be mounted in a 19" rack, directly to a surface and in any angle.

### Built to take a beating

The Switch is built to withstand the harshest conditions over the long haul. It features aluminium casing, rugged fiber 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

missions to come. We also serve units and stock spare parts for 5 years end-of-life.

### Features

- Cisco ESS-2020-24TC-CONB
- 1000BASE SX
- 100BASE FX
- Cisco 2020 Switch Architecture
- 12pcs 100BASE-FX
- 2pcs 100BASE-TX
- 2pcs 1000BASE-SX
- 10-32 VDC

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## Connector Interfaces

<b>X18</b> (back)	• 1x ETH100BASE-SX
<b>X19</b> (front)	• 1x Power
<b>X17</b> (back)	• 1x Service
<b>X1-X10</b> (front)	10 connectors which each has: <ul style="list-style-type: none"> <li>• 1x ETH 100BASE-FX</li> </ul>
<b>X11-X12</b> (back)	2 connectors which each has: <ul style="list-style-type: none"> <li>• 1x ETH100BASE-TX</li> </ul>
<b>X13-X14</b> (back)	2 connectors which each has: <ul style="list-style-type: none"> <li>• 1x ETH100BASE-FX</li> </ul>
<b>X15-X16</b> (back)	2 connectors which each has: <ul style="list-style-type: none"> <li>• 1x ETH100BASE-SX</li> </ul>

## Other Interfaces

- 16x Indicator (front)
- 1x System Button (front)

## Technical Specification

<b>LAN 1000BASE-SX</b>	1000BASE SX standard with MM 850nm fiber
<b>LAN 100BASE-FX</b>	100BASE FX standard with MM 1300nm fiber
<b>LAN 100BASE-TX</b>	100BASE TX
<b>Switch Architecture</b>	Cisco 2020 Switch Architecture including 12pcs 100BASE-FX, 2pcs 100BASE-TX and 2pcs 1000BASE-SX
<b>MIL-STD-1275D</b>	5.3.2.1 5.3.2.2 5.3.2.3 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>	40W
<b>Power input</b>	10-32 VDC
<b>Coating and color</b>	Dupont AE0305-6603120 (RAL6031)
<b>Dimensions</b>	440x43.4x230 mm
<b>Earth point</b>	M6 12mm
<b>Surface treatment chassis</b>	Chromit-Al

## 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>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 -40 C
<b>Low temperature - Storage*</b>	MIL-STD-810G, method 502.5, Procedure I - Storage -40 C
<b>Salt fog*</b>	MIL-STD-810G Method: 509.5
<b>Temperature Shock - Operating*</b>	MIL-STD 810G, method 503.5 procedures I - C, - Multi-cycle shocks from constant extreme temperature 55 C - 40 C
<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 EMI*</b>	EN61000-6-3:2007
<b>CE EMS*</b>	EN55022:2010

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<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 CS101*</b>	MIL-STD-461F, Method CS101, conducted suceptibility, power leads CURVE #1 30Hz to 150kHz
<b>EMS conducted CS114*</b>	MIL-STD-461F 10kHz - 200MHz Army, Ground
<b>EMS conducted CS115*</b>	MIL-STD-461F
<b>EMS conducted CS116*</b>	MIL-STD-461F 10 kHz to 100 MHz
<b>EMS radiated RS103*</b>	MIL-STD-461F 2MHz to 1GHz Army
<b>ESD*</b>	EN61000-4-2:2009 Level 3 EN50024:1998 Performance criteria B + A1:2001 + A2:2003