

19"/2[®] ESW5161



Rugged ethernet fiber switch

The MilDef 19"/2[®] ESW5161 switch offers a rugged ethernet fiber switch, based on the Cisco ESS2020 platform. Designed for tactical military environments where reliability and performance are key.

Customizable

Are you looking for features and functions beyond the standard solution? MilDef specialize in custom solutions and offer change of connectors, chassis modifications, mounting solutions, etc. Contact your nearest MilDef Sales Office and we will help you find a solution that meets your requirements.

Guaranteed performance

Our products come with lifetime support to ensure your equipment maintains peak performance for many missions to come. We also guarantee the availability of spare parts for 5 years after product end-of-life.

Features

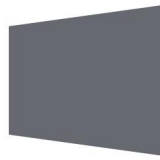
- Managed ethernet fiber switch
- Cisco ESS2020 switch architecture
- Layer 3 routing
- Rapid Spanning-Tree
- QoS
- SSH
- SNMPv3
- MIL-STD-810G
- MIL-STD-461F
- IP65 (open port)

Technical Specification

Switch Platform	Cisco ESS2020 switch
Software	Cisco LAN Base
Layer 2 switching	VLAN, CoS, MSP, RSP, Link Aggregation, VTPv3, NTP, UDLD, CDP, LLDP, Unicast MAC filter, Flex Link, REP, EtherChannel, Voice VLAN
Security	SCP, SSH, SNMPv3, TACACS+, RADIUS Server/Client, MAC Address Notification, BPDU Guard, SPAN session, Port-Security, DHCP Snooping, Dynamic Arp Inspection, IP Source Guard, 802.1x, Guest VLAN, MAC Authentication Bypass, 802.1x Multi-Domain Authentication, Storm Control, Trust Boundary
Multicast	IGMPv1, v2, v3 Snooping, IGMP filtering, IGMP Querier
Management	Web Device Manager, MIB, SmartPort, SNMP, syslog, Storm Control – Unicast, Multicast, Broadcast, SPAN Sessions, RSPAN, DHCP Server, Customized TCAM/SDM size configuration
Quality of service	Ingress Policing, Rate-Limit, Egress Queuing/shaping, AutoQoS
L2 IPv6	IPv6 Host support, HTTP over IPv6, SNMP over IPv6
Layer 3 routing	IPv4 Static Routing
MTBF (Ground Benign)	40 089 h (25°C)
Power Input (DC)	10-32V DC
Case	CNC milled Aluminum
Power consumption	21W (typical)
Dimensions (W x D x H)	220x 88x 202 mm (8.66 x 3.46 x 7.95 inch)
Weight	4,4 kg
Temperature (operating)	-20°C + 55°C (-4°F + 131°F)
Temperature (storage)	-40°C + 71°C (-40°F + 160°F)
Certifications	CE, IP65, MIL-STD-810G and MIL-STD-461F, REACH, RoHS

Connector Interfaces

Interfaces (front)	<ul style="list-style-type: none"> - 8x Ethernet 100Base-FX (Lemo) - 1x Console (ODU) - System button - MilDef Service (Binder)
Interfaces (back)	<ul style="list-style-type: none"> - 1x DC in 10-32V DC - Earth point



Environmental Specification

Dust & Sand

Dust

MIL-STD-810G, Method 510.5

Procedure I

Sand

MIL-STD 810G, Method 510.5

Procedure II

Low Air pressure

Low air pressure – Rapid Decompression

MIL-STD-810G, Method 500.5,

Procedure III – Rapid Decompression

Low air pressure - Operating

MIL-STD-810G, Method 500.5,

Procedure II - Operation/Air Carriage

Decompression altitude: 12.192 m / 40.000 ft

Cabin altitude: 2.438m / 8.000 ft

4.572 m / 15.000 ft

IP Class

IP

IP65

Humidity

Humidity – Storage

MIL-STD-810G, Method 507.5

Procedure II (Aggravated) - Figure 507.5-7

24-hours per cycle / Total of 10 cycles

Between 30°C (86°F) and 60°C (140°F) with the relative humidity at 95% constant

Shock

Functional Shock - Operating

MIL-STD-810G, Method 516.6

Procedure I – Figure 516.6-10

Transit drop (in shipping package)

MIL-STD-810G, Method 516.6

Procedure IV – Transit Drop

Table 516.6-II – Ground equipment

Terminal-peak sawtooth shock pulse

40g, 11ms

Table 516.6_VI

122 cm (48 inch)

26 drops

Salt Fog

Salt fog

MIL-STD-810G Method 509.5

5 % +- 1 % (by weight)

24 h wet + 24 h dry /cycle

Total 2 cycles / 96 hours

Temperature

Low temperature - Operating

MIL-STD-810G Method 502.5

Procedure II – Operation

Low temperature - Storage

MIL-STD-810G Method 502.5

Procedure I – Storage

High temperature - Operating

MIL-STD-810G Method 501.5

Procedure II – Operation

High temperature - Storage

MIL-STD-810G Method 501.5

Procedure I – Storage, Hot Dry (A1), Induced

Temperature Shock – Non-Operating

MIL-STD 810H Method 503.7

Procedure I-C (Figure 503.7-3)

-20 °C / -4 °F

-40 °C / -40 °F

55 °C / 131°F

71 °C / 160 °F

-40°C / -40°F to 55°C / 131°F

Vibrations

Vibration – Storage

MIL-STD-810G, Method 514.6

Procedure II – Lose Cargo Transport

Vibration - Operational

MIL-STD-810G, Method 514.6

Procedure I – General Vibration

Vibration - Operational

MIL-STD-810G, Method 514.6

Procedure I – General Vibration

Vibration - Operational

MIL-STD-810G, Method 514.6

Procedure I – General Vibration

Cat. 5 – Truck trailer – Lose Cargo

Cat. 14 - Rotary wing aircraft - helicopter

Helicopter = UH-1

Cat. 20 - Ground Vehicles – ground mobile, Tracked Vehicles

AECTP 400 (Ed. 3, 2006), Figure B-3,

Tracked Vehicle, Heavy Vehicle

Cat. 20 – Ground vehicles - ground mobile, wheeled vehicles.

AECTP 400 (Ed. 3, 2006), Figure A-2,

Tactical Wheeled Vehicle - All Terrain Test Description



EMC Specification

MIL-STD-461F

MIL-STD-461F, Method CE102	Conducted Emissions, Power Leads Base Curve 10 kHz to 10 MHz
MIL-STD-461F, Method CS101	Conducted susceptibility, power leads 30 Hz to 150 kHz Curve #1
MIL-STD-461F, Method CS114	Conducted Bulk Susceptibility Threshold: Army, Ground 10kHz to 200MHz
MIL-STD-461F, Method CS115	Conducted susceptibility, bulk cable injection, impulse excitation
MIL-STD-461F, Method CS116	Conducted Susceptibility, Damp Sinusoidal Transients, Cables & Power Leads 10 kHz to 100 MHz
MIL-STD-461F, Method RE102	Radiated Emissions, Electric Field Threshold: Ground Applications, Navy Mobile & Army 2 MHz to 18GHz
MIL-STD-461F, Method RS103	Radiated Susceptibility, Electric Field Threshold: Army 2MHz to 40GHz