# 19"/2® ESW2140 Series



### Layer 3 Switch

The 19"/2 ESW2100 Series presents a wide range of Cisco based, rugged, small form-factor switches that are ideal for space-constrained deployments in demanding environments.

19"/2® ESW2140 series comes with circular mighty mouse connectors for the Ethernet interfaces. The unit can be delivered with either IP Base or IP Services software and supports full layer 2 and layer 3 switching.

#### **Flexible Mounting**

All 19"/2 units can be mounted together in several different ways:

- One 19"/2 unit can be mounted in a 19" rack
- Two 19"/2 units can be mounted together in a 19" rack
- Two or more devices can also be stacked on top of each other



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Technical Specification			
Description	Layer 3 Switch based on the Cisco 3560-CX Switch		
Туре	Nonblocking line-rate switches		
Cisco IOS support	IP Base or IP Services (upgrade option)		
Flash	128 MB		
Memory DRAM	512 MB		
Max VLANs	1023		
Forwarding Rate (64 Byte Packet)	23.8 mpps / 50.6 mpps (10Gbit version)		
Forwarding Bandwidth	16 Gbps / 34 Gbps (10Gbit version)		
Swithching BW (full duplex capacity)	32 Gbps / 68 Gbps (10Gbit version)		
Routing support	Enterprice Access L3 (IP Base) / Complete Access L3 (IP Services)		
Management and Operations	LACP, DHCP, MVR, Voice LAN, VTP, RSPAN, RMON, Cisco Instant Access Mode (only 10Gbit version).		
Traffic Management and QoS	<ul> <li>Up to eight egress queues per port and strict priority queuing.</li> <li>Shaped Round Robin (SRR)</li> <li>Weighted Tail Drop (WTD)</li> <li>Flow-based rate limiting</li> <li>Up to 256 aggregate or individual policers per port.</li> <li>NetFlow Lite</li> </ul>		
Security	Cisco TrustSec SXP, 802x1x, IEEE 802.1AE MACsec, Private VLAN, SSH, Kerberos, SNMPv3, ACL, Secure Boot, etc.		
Option	- PoE+		
Power input	12-32V DC		
MTBF	107258h (Ground Benign / ESW2122)		
Transient power protection	Designed to meet MIL-STD-1275D		
Case	Aluminium		
Dimensions	220x400x44 mm (W x D x H)		
Weight	TBD		
Certification	Designed to meet IP65, MIL-STD-810F, MIL-STD-461F and MIL-STD-1275D		
Other	No fans		

#### Designed to meet:

MIL-STD-810G	Operating	Storage		
Altitude Method 500.5, (procedure II,III)	4572 m (15000 ft)	Rapid decompression 12192 m (40000 ft)		
Humidity Method 507.5 (procedure II)	Aggrevated, 10 x 24 h cycles 95%RH	-		
Shock Method 516.6, (procedure I, IV)	40 G, 11 ms (Terminal-peak saw tooth shock pulse)	122 cm (26 drops)*		
Salt fog Method 509.5, ( <i>Procedure I</i> )	4 x 24 hrs	-		
Temperature Method 501.5 & Method 502.5, (procedure I, II)	-40°C** to 55°C (with full PoE load) -40°C to 65°C ** (witout PoE)	-40 °C to 71 °C		
Temperature shock Method 503.5 (procedure I)	-40 °C to 55°C	-		
Vibration Method 514.6 (procedure I) - Category 2 - 14 Helicopter - 20 Tracked vehicles -20 Wheeled vehicles	- V V	<b>V</b>		

<sup>\*</sup> Only with optional Peli Case

#### Designed to meet:

MIL-STD-461F	Limitation	Threshold
EMI radiated Method RE102	10 kHz to 18 GHz	Navy Mobile & Army
EMI radiated Method RS103	2 MHz to 1 GHz	Army
EMI conducted Method CE102	10 kHz to 10 Mhz	Basic Curve
EMI conducted Method CS101	30Hz to 150 kHz	Curve #1
<b>EMI conducted</b> Method CS114	10 kHz to 200 MHz	Army
EMI conducted Method CS115	Tested according to standard	Army
EMI conducted Method CS116	10 kHz to 100 MHz	Army





<sup>\*\*-</sup> $40^{\circ}$ C to +  $71^{\circ}$ C (w/o. PoE) with extend temperature option

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### ESW2140 Series Product line

Variant	Interfaces front	Interfaces back	Available PoE Power	Power Consumption
ESW2144	10x LAN Mighty Mouse Copper w. PoE+ (10/100/1000 Mbps) 1x System Button 1x DC in 12-32V	2x LAN Mighty Mouse Copper w. PoE+ (10/100/1000 Mbps) 2x LAN RJ45 Copper w/o PoE (10/100/1000 Mbps) 1x Service port 1x Earth bonding point	124W (19-32VDC) 60 W (12-18VDC)	TBD
ESW2145	10x LAN Mighty Mouse Copper (10/100/1000 Mbps) 1x System Button 1x DC in 12-32V	4x LAN Mighty Mouse Copper (10/100/1000 Mbps) 1x Service port 1x Earth bonding point	N/A	Min/Typ/Max 18W/22W/24W



