ER59400 Series

IP-67 Grade M12 Managed Hardened 16-port 10/100BASE-TX (8 x PoE) + 2-port Gigabit Ethernet Switch (Compliant with EN50155/50121-3-2 environmental requirements)

NEW

Value

EN50155 EN50121-4   α-RING   Extended Temperature

- Provide 16-port 10/100BASE-M12 plus 2-port Gigabit-TX waterproof connector/LC Fiber waterproof connector
- Port 1 to 8 supports PoE function 802.3at 30W max.
- Compliant with EN50155/50121-3-2 environmental requirements

M12 connectors are designed for "rolling stock" railway transportation applications

Gore-Tex Vent provides pressure and humidity equalization, preventing water permeating

Features

- Supports PoE Power Sourcing Equipment (PSE)
- PoE control and scheduling
- Supports α-ring and STP/RSTP for Ethernet redundancy
- Supports Port-base VLAN, IEEE802.1Q VLAN Tagging and GVRP
- Supports STP/RSTP and EtherWAN α-ring for Ethernet redundancy
- IP multicast filtering through IGMP Snooping V1, V2 and V3
- IEEE802.1p QoS with four priority queues
- MAC-based trunking and LACP
- Supports IEEE802.1x port-security

- Bandwidth rate control
- Port-lock for authorized MAC address access only
- Port mirroring
- NTP synchronization
- Support SSH/SSL
- Front panel port status LEDs
- Support Wall Mount installation
- Management through console, Telnet, SNMP V1, V2c & V3, RMON, Web Browser and TFTP
- -40°C to 75°C operating temperature range

Ordering Information

ER59402-YZP   16-port M12 10/100BASE-M12 + 2-port 10/100/1000BASE Managed Hardened Ethernet Switch

Gigabit Options :
(Y) = 1 : 10/100/1000BASE-TX
     3 : 1000BASE-LX (LC) - 550m
     A : 1000BASE-LX (LC) - 10Km
     B : 1000BASE-LX (LC) - 20Km
     *More Gigabit options also available upon request.

Power Input Options :
(Z) = T : 12 to 48VDC, 18 to 30VAC (for non-PoE model)
     G : 55VDC (47 to 57 VDC) (for PoE model)

PoE type :
(P) = 0 : non-PoE
     T : PoE 802.3at
M23 Power Connector: (Option)
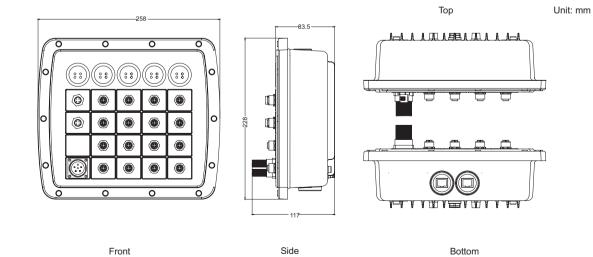SF-5ES1N8A80WW

Installation Type :
Panel Mount (mounting kit is included)

Specifications

Technology	
Standards	IEEE802.3 10BASE-T, IEEE802.3u 100BASE-TX/FX, IEEE802.3x, IEEE802.3ab 1000BASE-T, IEEE802.3z 1000, IEEE802.1p CoS, IEEE802.1D STP, IEEE802.1w RSTP
Forward and Filtering Rate	14,880pps for 10Mbps 148,810pps for 100Mbps 1,488,100pps for 1000Mbps
Processing Type	Store-and-Forward Half-duplex back-pressure and IEEE802.3x full-duplex flow control
Address Table Size	8K MAC addresses
Power	
Power Input	Redundant power inputs: M23: 12 - 48VDC, 18 - 30VAC (for non-PoE model) M23: 47 - 57VDC (for PoE model)
Power Consumption	Device: Max. 11W (without PoE) PoE power budget (depends on power input): 240W Max.
PoE Power Output	Port 1 to 8 IEEE802.3at: up to 15.4W/port, 47 - 57VDC IEEE802.3at: up to 30W/port, 50 - 57VDC
* Supports overload current protection	
* Supports reverse polarity protection	
Mechanical	
Casing	Metal case IP67
Dimensions	258mm(W) x 117mm(D) x 228mm(H) (10.15" (W) x 4.6"(D) x 8.97"(H))
Weight	3Kg(6.6lbs.)
Installation	Wall mount
Interface	
Ethernet Port	10/100BASE-M12 D-Code 4-Pin Female: 16 ports Gigabit-TX/LC: 2 ports

Console Port	Port: One M12 RS-232 port
LED Indicators	Per Unit: Power Status: Power 1 (Green), Power 2 (Green) Per Port: 10/100BASE: Link/Activity (Green) Gigabit: Link/Activity (Green)
Alarm Contact	One relay M12 A-Code 4-Pin Female output with corrent 1A @ 250VAC
Environment	
Operating Temperature	-40°C to 75°C (-40°F to 158°F)
Storage Temperature	-40°C to 85°C (-40°F to 168°F)
Ambient Relative Humidity	5% to 95% (non-condensing)
Regulatory Approvals	
ISO	Manufactured in an ISO9001 facility
Safety	UL508 (Pending)
EMI	FCC Part 15, Class A CE, VCCI Class A EN61000-6-4 - EN55022 - EN61000-3-2 - EN61000-3-3
EMS	EN61000-6-2 - EN61000-4-2 (ESD) - EN61000-4-3 (RS) - EN61000-4-4 (EFT) - EN61000-4-5 (Surge) - EN61000-4-6 (CS) - EN61000-4-8 - EN61000-4-11 * EN50155 related certificates (for Rolling Stock Railway applications, according to EN50155 and EN50121-3-2)

Dimensions

Front　　　　　　Side　　　　　　Bottom

Top　　　　　　Unit: mm