ES118M Series

18-port EN50155 Industrial Ethernet Switches

- EN50155 compliant Ethernet switch for railway applications
- Support ERPS, STP/RSTP/MSTP for network redundancy
- IGMP Snooping for filtering multicast traffic
- Port-based VLAN, IEEE 802.1Q VLAN, and GVRP to ease network planning
- Port Trunking for optimum bandwidth utilization
- RADIUS,TACACS+,SNMPv3,IEEE 802.1X,HTTPS and SSH to enhance network security
- QoS (IEEE 802.1p/CoS) and ToS/DiffServ to increase determinism
- SNMPv1/v2c/v3 for different levels of network management
- RMON for efficient network monitoring and proactive capability
- Support port mirroring
- Bandwidth management prevents unpredictable network status
- Lock port function for blocking unauthorized access based on MAC address
- Automatic alarm through e-mail, relay out
- User friendly UI and command command Line Interface (CLI) for quickly configuring major managed functions
- M12 connectors to guarantee reliable operation against environmental disturbances
- Wall mounting enabled

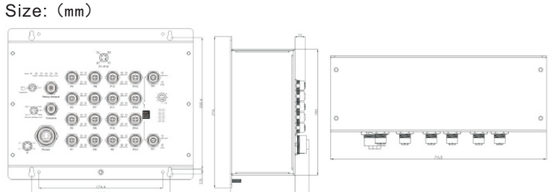
Overview:

The ES118M series Ethernet switches are designed for industrial applications, such as rolling stock, vehicle, and railway applications. It has 16x10/100Base-T(X) and 2x10/100/1000Base-T(X) ports which is compliant with EN50155 requirement. It is specifically designed for the toughest industrial environments.

With completely support of Ethernet Redundancy protocol, ERPS and RSTP/STP can protect your mission-critical applications from network interruptions or temporary malfunctions with its fast recovery technology. ES118M series supports functions of network management, such as SNMP, RMON, Port Trunking, and Port/Tag-based VLAN security. In addition, the wide operating temperature range from -40 to 85℃ can satisfy most of operating environment. Therefore, the switch is one of the most reliable choices for rolling stock and highly-managed Ethernet application.

Dimensions:

Size:（mm）



Front view　　side view　　Vertical view

Order information:

Model No	Description	
	10/100BaseT(X)	10/100/1000BaseT(X)
WT-ES-10216_G	16	2

Specifications:

Protocols	IGMPv1/v2/v3, GMRP, GVRP, SNMPv1/v2c/v3,DHCP Server/Client, DHCP Option 66/67/82,BootP,TFTP, SNTP,SMTP, RARP, RMON, HTTP, HTTPS,Telnet, SSH, Syslog,EtherNet/IP, PROFINET,Modbus/TCP, SNMP Inform, LLDP,IEEE 1588 PTP V2, IPv6, NTP Server/Client
MIB	MIB-II, Ethernet-Like MIB, P-BRIDGE MIB,Q-BRIDGE MIB, Bridge MIB, RSTP MIB, RMON MIB Group 1, 2, 3, 9
Flow Control	IEEE 802.3x flow control, back pressure flow control
Switch Properties	Priority Queues: 4　IGMP Groups: 256　Jumbo Frame Size:9.6 KB Max. Number of Available VLANs: 64　MAC Table size:8K VLAN ID Range: VID 1 to 4094　Packet Buffer Size:1Mbit
Interface	Rj45 ports: 10/100/1000 Base-T(X) Port in M12 D-coding Auto MDI/MDIX RJ45 ports: 10/100 Base-T(X) Ports in M12 D-coding Auto MDI/MDIX Console Port: RS-232 in M12 connector LED Indicators: PWR,L/A,SPD
Power Requirement	Input Voltage: Dual 12~48VDC　Power Consumption: 11 Watts Connection: M23 connector　Overload Current Protection：Present Reverse Polarity Protection: Present
Physical Characteristics	Housing: Aluminum，IP40 protection Dimensions: 170 x 196 x 75mm (6.7 x 7.7 x 2.95 in)　Weight: 1400g Installation: Field-style mounting, DIN-Rail mounting (with optional kit)
Environmental Limits	Operating Temperature: -40 ~ 85 ℃ (- 40 ~ 185 °F) Storage Temperature: -40 ~ 85 ℃ (- 40 ~ 185 °F) Ambient Relative Humidity: 5 ~ 95% (non-condensing)
Standards	EMI : FCC Part 15 Subpart B Class A, EN 61000-6-4(Industrial) EMS: EN 61000-6-2 (Industrial), EN 61000-4-2 (ESD) Level 4, EN 61000-4-3 (RS) Level 3, EN 61000-4-4 (EFT) Level 4, EN 61000-4-5 (Surge) Level 4, EN 61000-4-6 (CS) Level 3, EN 61000-4-8, IEEE 1613 Shock: IEC 60068-2-27 Freefall: IEC 60068-2-32 Vibration: IEC 60068-2-6 MTBF （mean time between failures）：305,000 hrs IEEE 802.3 for 10Base-T IEEE 802.3u for 100Base-TX IEEE 802.3ab for 1000Base-T IEEE 802.1D for Spanning Tree Protocol IEEE 802.1w for Rapid Spanning Tree Protocol IEEE 802.1s for Multiple Spanning Tree Protocol IEEE 802.1Q for VLAN Tagging IEEE 802.1p for Class of Service IEEE 802.1X for Authentication IEEE 802.3ad for Port Trunk with LACP IEEE 802.3x for Flow Control
Warranty	5 years