

ES 4010P-M12

10 Port M12 Industrial Managed PoE+ Booster Gigabit Ethernet Switch



- Compliant with EN50155
- 8x 10/100T(x) M12 connector with IEEE 802.3at PoE+
- 2x 10/100/1000T(x) M12 connector with relay bypass
- Support Bypass function for non-stop communication even when no power exists
- Built for harsh environments and wide temperature range application
- RSTP, MSTP, ERPS, LACP for Network Redundancy
- QoS CoS/DSCP to increase determinism
- Supports IGMP Snooping v1/v2/v3, up to 512 groups
- DHCP Relay Option 82 for policies IP address assignment
- SNMP v1/v2c/v3 for network management
- Supports Storm Protection
- Supports industrial automation protocols Ethernet/IP and Modbus TCP
- Supports PoE PD Alive Check Function for PoE Device Power Recycle
- Isolated redundant PoE power 190W

Ordering Information

ES 4010P-M12-24V-IP40

- 8x 10/100T(x) with 30W PSE + 2x 10/100/1000T(x) M12 connector
- Power Input: 24VDC
- Max. Power Budget: 190W
- Operating Temperature: -40°C ~ 75°C (-40°F ~ 167°F)
- Protection Class: IP40

Optional Accessories

DRL-24V240W1EN

Industrial DIN-Rail Power Supply, 240W, 24VDC (metal case)

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Technology

IEEE 802.3 10BaseT
 IEEE 802.3u 100BaseTX
 IEEE 802.3ab 1000BaseT
 IEEE 802.3x Flow Control
 IEEE 802.3af Power over Ethernet
 IEEE 802.3at PoE+
 IEEE 802.3az Energy-Efficient Ethernet
 IEEE 802.3ad/802.1AX LACP
 IEEE 802.1D Spanning Tree Protocol
 IEEE 802.1w Rapid STP
 IEEE 802.1s Multiple STP
 ITU-T G.8032 / Y.1344 ERPS
 IEEE 802.1Q VLAN Tagging
 IEEE 802.1ad Stacked VLANs
 IEEE 802.1p Class of Service
 IEEE 802.1X Network Authentication
 IEEE 802.1AB LLDP
 IEEE 1588 PTP

Standards

Processing Type Store and Forward

Switch Properties

Switch Fabric 5.6Gbps
Priority Queues 8 Queues
Jumbo Frame 9216bytes
MAC Table Size 16K
Packet Buffer 12Mbits
VLAN Table Size 4094
IGMP Group 512
ACL Group 512

Software Feature

Network Redundancy RSTP, MSTP, G.8032 ERPSv2, Port Trunking with LACP
Security 802.1X, RADIUS, TACACS+, SSL, SSH
Management IPv4, IPv6, Web, Telnet, Serial Console, CLI, SNMP v1/v2c/v3, uPnP
Diagnostics RMON, SNMP Inform/Trap, Syslog, SMTP, Port Mirroring, LLDP, RSPAN
Configuration DHCP Server/Client, Relay Option 82, TFTP
Filter 802.1Q VLAN, Q-in-Q, IGMP Snooping v1/v2/v3, IGMP Querier, Independent Vlan Learning
Time Sync. NTP, IEEE1588v2 OC (Software Timestamp), TC (Hardware Timestamp)
QoS CoS, DSCP, WRR/SPQ Queuing, Storm Protection
PoE Powering Status, PoE Monitoring, Scheduling, PD Alive Check
Industrial Profiles Ethernet/IP, Modbus TCP, Profinet, TRDP

Interface

Network Connector 8x 10/100T(x) M12 Female D-coded 4-pole with PoE+, 2x 10/100/1000T(x) M12 Female X-coded 8-pole, auto negotiation speed duplex mode, auto MDI/MDI-X
LED Indicators Per unit: PWR1, PWR2, Status
Ports: Link/Active with highest speed(Green), low speed(Amber)
PoE: Output Power
Alarm Contact 1x relay output with current carrying capacity of 1A @ 24 VDC
Serial Console 1x RS232 in M12 Male A-coded 5-pole connector with console cable, 115.2Kbps, 8N1

Power Requirements

Operation Voltage 9-36VDC / 16.5-75VDC* / 43-160VDC*, redundant dual inputs, >50VDC for PoE+ output recommended
Connection M12 Male S-coded 4-pole
Power Consumption 0.6A@24VDC; 0.33A@48VDC; 0.15A@110VDC
PoE Power Budget Max. 30 W per PoE port. Max. total output power for PD: 190W@24V input; 190W@48V input; 156W@110V input
Protection Overload Current Protected, Reverse Polarity Protected

Mechanical Construction

Enclosure SECC
Protection Class IP40/IP54*
Dimensions 143x209x77 mm (WxHxD)
Weight 2.16 kg
Mounting Wall Mounting, DIN-Rail Mounting

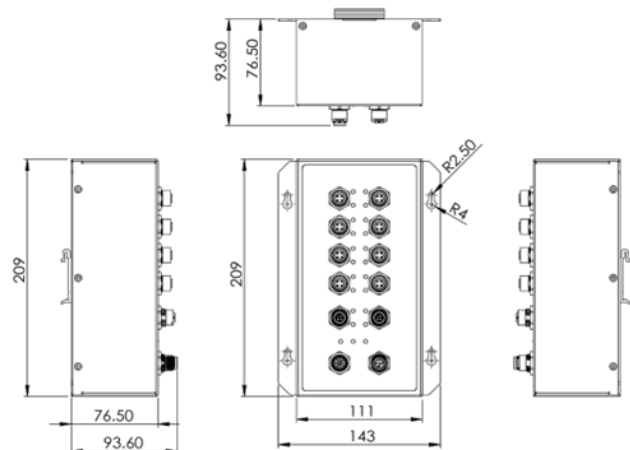
Environmental Limits

Operating Temperature -40°C ~ 75°C (-40°F ~ 167°F)
Storage Temperature -40°C ~ 85°C (-40°F ~ 185°F)
Ambient Relative Humidity 5 to 95%, (Non-Condensing)

Regulatory Approvals

EMI FCC Part 15 Subpart B Class A
 CE EN 55032 Class A
 IEC61000-4-2 (ESD)
 IEC61000-4-3 (RS)
EMS IEC61000-4-4 (EFT)
 IEC61000-4-5 (Surge)
 IEC61000-4-6 (CS)
 IEC61000-4-8 (Magnetic Field)
Free Fall IEC60068-2-32
Shock IEC61373
Vibration IEC61373
Green RoHS Compliant
Certifications EN 50155
 EN 45545-2
MTBF >100,000 hours
Warranty 5 Years

Dimensions (mm)



Features with star(*) implies those are Optional.

In a continuing effort of improvement and updated technology, product specifications are subject to change without notice.

