

# MS-0802C-M12

## 10 Port M12 Industrial Managed Gigabit Ethernet Switch



- Compliant with EN50155
- 8x 10/100T(x) M12 connector
- 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



### Specifications

#### Technology

IEEE 802.3 10BaseT  
 IEEE 802.3u 100BaseTX  
 IEEE 802.3ab 1000BaseT  
 IEEE 802.3x Flow Control  
 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

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

#### Interface

<b>Network Connector</b>	8x 10/100T(x) M12 Female D-coded 4-pole, 2x 10/100/1000T(x) M12 Female X-coded 8-pole, auto negotiation speed duplex mode, auto MDI/MDI-X
<b>LED Indicators</b>	<b>Per unit:</b> PWR1, PWR2, Status <b>Ports:</b> Link/Active with highest speed(Green), low speed(Amber)

<b>Alarm Contact</b>	1x relay output with current carrying capacity of 1A @ 24 VDC
<b>Serial Console</b>	1x RS232 in M12 Male A-coded 5-pole connector with console cable, 115.2Kbps, 8N1

### Power Requirements

<b>Operation Voltage</b>	24-48VDC, 72-110VDC, redundant dual inputs
<b>Connection</b>	M12 Male S-coded 4-pole
<b>Power Consumption</b>	0.59A@24VDC; 0.2A@72VDC
<b>Protection</b>	Overload Current Protected, Reverse Polarity Protected

### Mechanical Construction

<b>Enclosure</b>	SECC
<b>Protection Class</b>	IP54
<b>Dimensions</b>	143x209x77 mm (WxHxD)
<b>Weight</b>	1.20 kg
<b>Mounting</b>	Wall Mounting Kits, Optional DIN-Rail Mounting

### Environmental Limits

<b>Operating</b>	Extended: -40°C ~ 75°C (-40°F ~ 167°F)
------------------	----------------------------------------

### Temperature

<b>Storage Temperature</b>	-40°C ~ 85°C (-40°F ~ 185°F)
<b>Ambient Relative Humidity</b>	5 to 95%, (Non-Condensing)

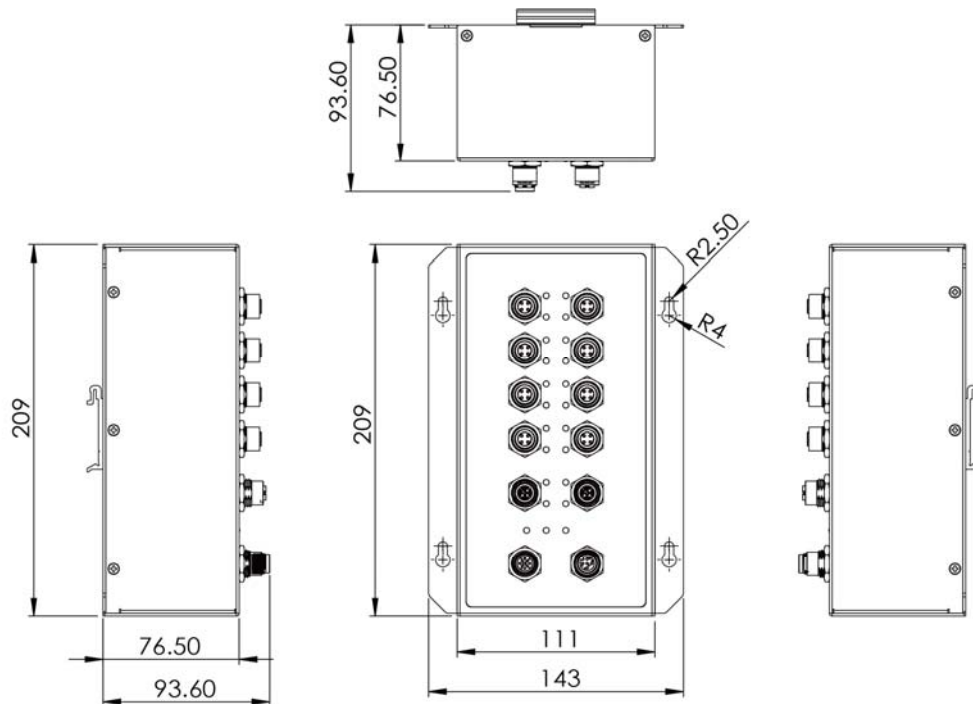
### Regulatory Approvals

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

Features with star(\*) implies those are under development.

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

## Dimensions (unit = mm)



## Ordering Information

MS-0802C-M12-LVU-T 10 Port M12 Industrial Managed Gigabit Ethernet Switch

- 8x 10/100T(x) + 2x 10/100/1000T(x) M12 connector
  - Power Input: 24-48VDC
  - Operating Temperature: -40°C ~ 75°C (-40°F ~ 167°F)
  - UL Compliant
- 

**MS-0802C-M12-HVU-T**

- 10 Port M12 Industrial Managed Gigabit Ethernet Switch
- 8x 10/100T(x) + 2x 10/100/1000T(x) M12 connector
  - Power Input: 72-110VDC
  - Operating Temperature: -40°C ~ 75°C (-40°F ~ 167°F)
  - UL Compliant