

## NSM-208-M12 *NEW*

EN50155 8-port M12 Unmanaged Ethernet Switch

## NSM-208PSE-M12

EN50155 8-port M12 Unmanaged PoE Ethernet Switch

NSM-208-M12



NSM-208PSE-M12



### Highlight Information >>>

For NSM-208PSE-M12

NSM-208-M12/NSM-208PSE-M12



### Features >>>

- Each port supports both 10/100 Mbps speed auto negotiation
- 8 PoE ports with Power Sourcing Equipment (PSE) operation (NSM-208PSE-M12)
- Over-temperature, over-current and over/under-voltage detection (NSM-208PSE-M12)
- 8-port 10/100 Mbps M12 type connector with IP40 protection
- EN50155-certified for harsh railway standards
- Automatic MDI/MDI-X crossover for plug-and-play
- Store-and-forward architecture
- Full duplex IEEE 802.3x and half duplex backpressure flow control
- Auto-detection of PD (powered devices) and automatic power management (NSM-208PSE-M12)
- Operating temperatures, -40 ~ +75°C

### Introduction

The NSM-208PSE-M12/NSM-208-M12 is designed for industrial applications in harsh environments. The M12 connectors ensure tight, robust connections, and guarantee reliable operation, even for applications that are subject to high vibration and shock.

The NSM-208PSE-M12 PoE switch provide 8 fast Ethernet M12 ports with 8 IEEE 802.3af compliant PoE ports. The switch is classified as power source equipment (PSE) and provide up to 15.4 W of power per port.

The Ethernet switch support IEEE 802.3/802.3u/802/3x with 10/100M, full/half-duplex, MDI/MDI-X auto-sensing, and provide an economical solution for your industrial Ethernet network.

The NSM-208-M12 provides a wide 12 to 53 V<sub>DC</sub> power range to fit all the common power standards found in industrial automation, without external power converters. The wide power input lowers installation and maintenance costs.



Specifications

Models	NSM-208PSE-M12	NSM-208-M12
<b>Technology</b>		
Standards	IEEE 802.3, 802.3u, 802.3x, 10/100 Base-T(X) auto negotiation speed, F/H duplex mode, and auto MDI/MDI-X connection	
Processing Type	Store & forward	
MAC Addresses	1024	
Memory Bandwidth	3.2 Gbps	
Frame Buffer Memory	512 Kbit	
Flow Control	IEEE 802.3x flow control, back pressure flow control	
<b>Interface</b>		
LED Indicators	PWR, Link/Act, Power Device is detected	PWR, Link/Act
Ethernet Isolation	1500 V <sub>rms</sub> 1 minute	
Connection	Female 4-Pin shielded M12 D-coding connector X 8	
<b>Power Input</b>		
Input Voltage Range	+46 V <sub>dc</sub> ~ +53 V <sub>dc</sub>	+12 V <sub>dc</sub> ~ +53 V <sub>dc</sub>
Power Consumption	0.12 A @ 48 V <sub>dc</sub> without PD loading 3.0 A @ 48 V <sub>dc</sub> with PD full loading	0.12 A @ 48 V <sub>dc</sub>
Protection	Power reverse polarity protection	
Connection	Male 5-Pin shielded M12 A-coding connector X 1	
<b>PoE Technology</b>		
PoE Compliance	100% IEEE 802.3af compliant	-
PoE Classification	PSE (Power Sourcing Equipment)	-
PoE Voltage	+46 ~ +48 V <sub>dc</sub> depending on power input	-
PoE Power	Up to 15.4 W per port	-
PoE Operation	Automatic detection and power management	-
PoE Pin Assignments	V+ (Pin 1, 3), V- (Pin 2, 4)	-
PoE Disconnect Mode	DC disconnect	-
<b>Mechanical</b>		
Casing	Metal with IP40	
Dimensions (W x L x H)	190 mm x 56 mm x 100 mm	
Installation	Wall Mounting	
<b>Environmental</b>		
Operating Temperature	-40 °C ~ + 75 °C	
Storage Temperature	-40 °C ~ + 85 °C	
Ambient Relative Humidity	10 ~ 95% RH, non-condensing	

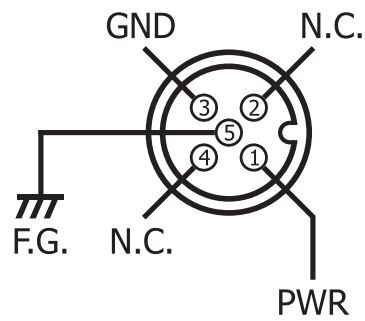
Pin Functions for Power Input

External power supply is connected using the M12 A-coding:

**PWR:** Power input and should be connected to the power supply (+)

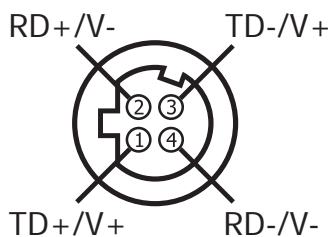
**GND:** Ground and should be connected to the power supply (-)

**F.G.:** F.G. stands for Frame Ground (protective ground). It is optional. If you use this pin, it can reduce EMI radiation; improve EMI performance and EMS protection.

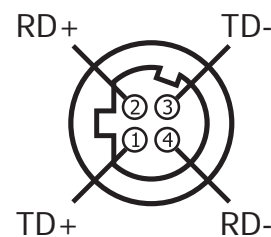


Pin Functions for Ethernet Port

For NSM-208PSE-M12



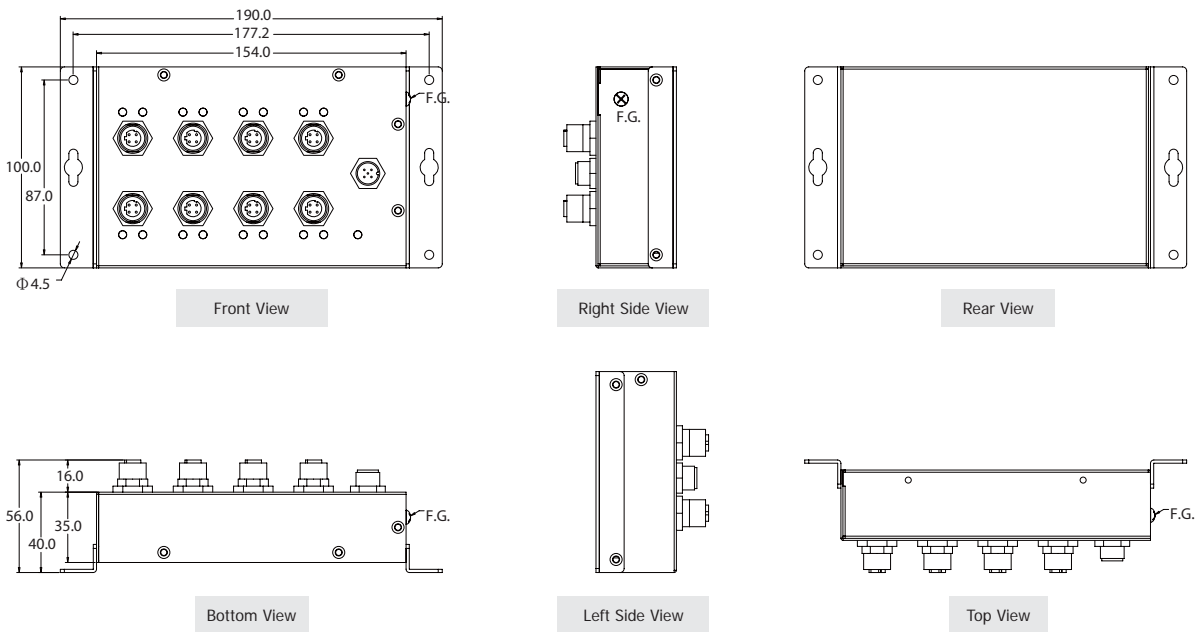
For NSM-208-M12



### Applications



### Dimensions (Units: mm)



### Ordering Information

NSM-208-M12 CR	EN50155 8-port M12 Unmanaged Ethernet Switch (RoHS) Includes M12D-4P-IP68 x 8, A-CAP-M12M x 8, M12A-5P-IP68 and A-CAP-M12F x 1
NSM-208PSE-M12 CR	EN50155 8-port M12 Unmanaged PoE Ethernet Switch (RoHS) Includes M12D-4P-IP68 x 8, A-CAP-M12M x 8, M12A-5P-IP68 and A-CAP-M12F x 1

### Accessories

MDR-60-48	48 V/1.25 A, 60 W Power Supply with DIN-Rail Mounting
DIN-KA52F-48	48 V/0.52 A, 25 W Power Supply with DIN-Rail Mounting
KA52F-48	48 V/0.52 A, 25 W Power Supply

<p>M12D-4P-IP68</p> <p>4PIO1K0000001</p>	<p>A-CAP-M12M</p> <p>4PIO1K0000002</p>	<p>M12A-5P-IP68</p> <p>4PIO1K0000003</p>	<p>A-CAP-M12F</p> <p>4PIO1K0000004</p>
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