

# NSM-208PSE-M12

EN50155 8-port M12 Unmanaged PoE Ethernet Switch

# NSM-208-M12

EN50155 8-port M12 Unmanaged Ethernet Switch



## Features:

- Each port supports both 10/100 Mbps speed auto negotiation
- 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
- Full duplex IEEE 802.3x, auto MDI/MDI-X connection and half duplex backpressure flow control
- EN50155/50121-3-2/50121-4, and NEMA TS2 compliant
- Automatic MDI/MDI-X crossover for plug-and-play
- Auto-detection of PD (powered devices) and automatic power management (NSM-208PSE-M12)
- Supports operating temperatures from -40 °C ~ +75 °C

## Specifications:

Models	NSM-208PSE-M12	NSM-208-M12
<b>Technology</b>		
Standards	IEEE 802.3, 802.3u, 802.3x ,802.3af (Power over Ethernet),	IEEE 802.3, 802.3u, 802.3x
Processing Type	Store & forward	
MAC Addresses	1024	
Memory Bandwidth	3.2 Gbps	
Frame buffer memory	512 Kbit	
Flow Control	IEEE802.3x flow control, back pressure flow control	
<b>Interface</b>		
LED Indicators	Power, Link/Act , Power Device is detected	Power, Link/Act
Ethernet Isolation	1500 Vrms 1 minute	
Connector	Female 4-pin shielded M12 D-coding connector	
Cable	Fast Ethernet: Ethernet CAT5e (TIA 568B:2001)	
<b>Power Input</b>		
Input Voltage Range	+46 ~ +53 VDC for PoE output	+12 ~ +53 VDC
Power consumption	0.12 A@ 48 VDC without PD loading; 3.0 A@ 48 VDC with PD full loading	0.12 A@ 48 VDC
Protection	Power reverse polarity protection	
Connector	Male 5-pin shielded M12 A-coding connector	
<b>PoE Output</b>		
PoE Compliance	100% IEEE 802.3af compliant	--
PoE Classification	PSE (Power Sourcing Equipment)	--
PoE Voltage	+46 ~ +48 VDC depending on power input	--
PoE Power	Up to 15.4 watts per channel	--
<b>Mechanical</b>		
Case	Metal with IP40	
Dimensions	190 mm x 56 mm x 100 mm (W x L x H)	
Installation	Wall mounting	

Environmental	
Operating Temperature	-40 ~ +75°C
Storage Temperature	-40 ~ +85°C
Ambient Relative Humidity	10% ~ 90% HR, non-condensing

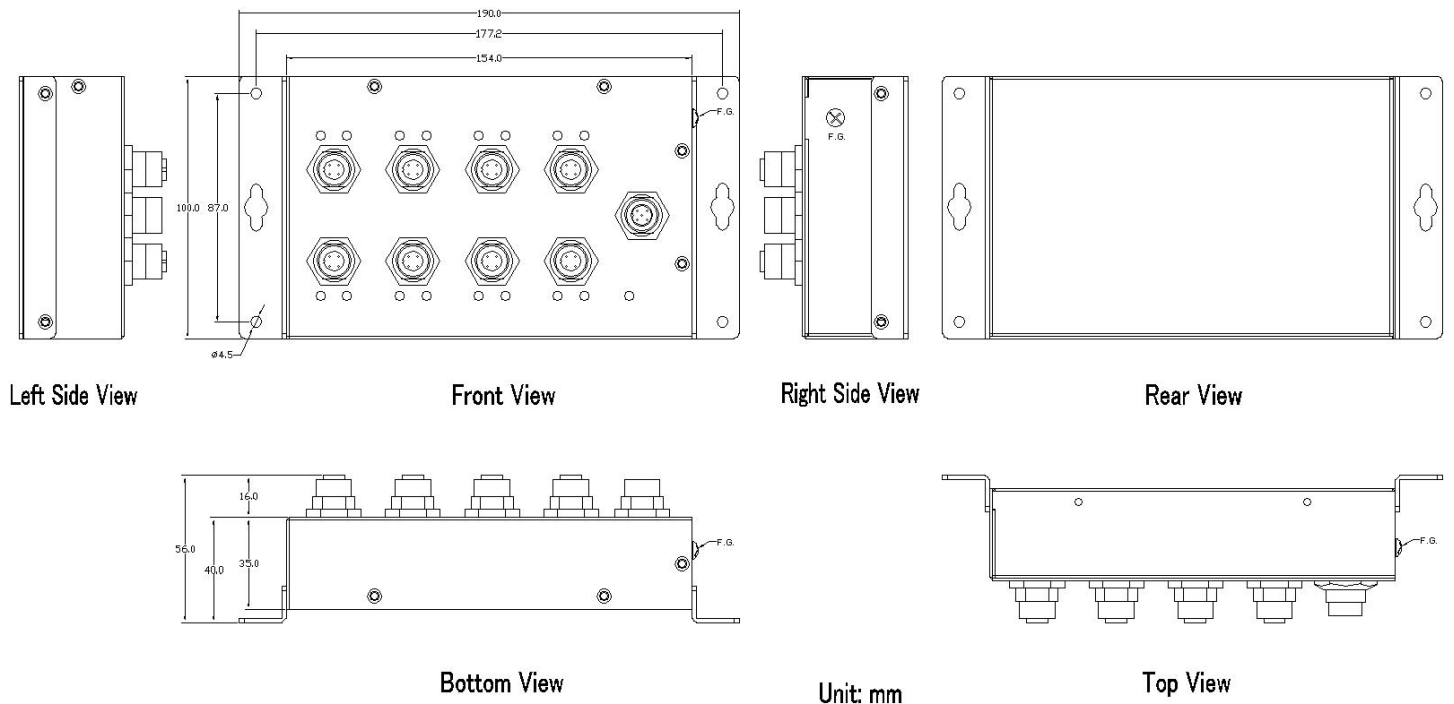
**NSM-208PSE-M12 LED Indicator Functions:**

LED	Color	Description
Power	Red On	Power is On
	Red Off	Power is Off
Port1~8	Yellow On	Power Device is detected
	Green On	Link/Act

**NSM-208-M12 LED Indicator Functions:**

LED	Color	Description
Power	Red On	Power is On
	Red Off	Power is Off
Port1~8	Green On	Link/Act

**Dimensions for NSM-208PSE-M12/NSM-208-M12:**



**Pin Function For Power input:**

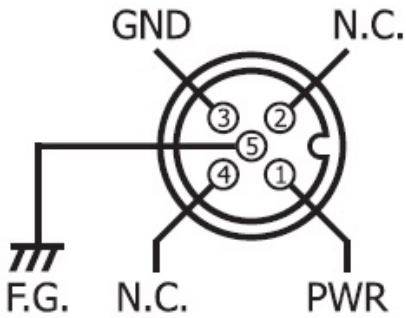
External power supply is connected using the M12 A-coding:

**PWR (Power)** : Power input (+12 ~ +53 VDC for NSM-208-M12; +46 ~ +53 VDC for NSM-208PSE-M12) and should be connected to the power supply (+)

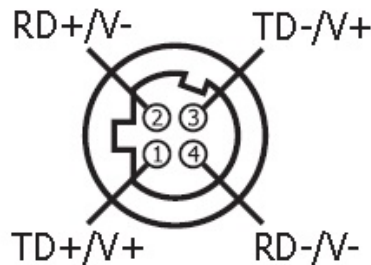
**GND:** Ground and should be connected to the power supply (-)

**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 ESD protection.

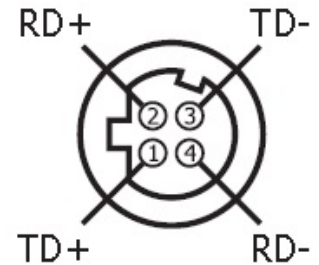
**Pin Function For PoE and Ethernet:**



**Power Input**



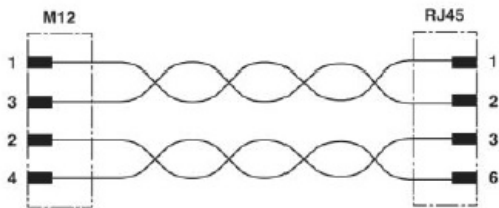
**PoE/Ethernet  
(NSM-208PSE-M12)**



**Ethernet  
(NSM-208-M12)**

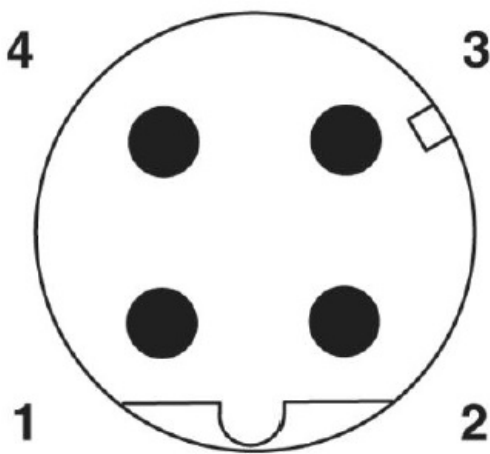
**How to connect M12 connector to RJ-45 cable?**

Circuit diagram



Contact assignment of the M12 and RJ45 plug

Schematic diagram



Pin assignment M12 male connector, 4-pos., D-coded, male side

