# NS-205PSE-24V/NSM-205PSE-24V

## 5-Port 10/100 Mbps PoE (PSE) Ethernet Switch with 24 VDC Input



#### Introduction

The NS-205PSE-24V/NSM-205PSE-24V is a 5-port unmanaged PoE (Power-over-Ethernet) Industrial Ethernet switch; it supports 4 PoE ports which are classified as power source equipments (PSE). The NS-205PSE-24V/NSM-205PSE-24V makes centralized power supply come true and provides up to 15.4 watts of power per PSE port.

The NS-205PSE-24V/NSM-205PSE-24 is designed with 24 VDC to 48 VDC boost for PoE application where 48 VDC power supply is not available.

#### **Features**

Automatic MDI/MDI-X crossover for plug-and-play
Each port supports both 10/100Mbps speed auto negotiation
Store-and-forward architecture
Full duplex IEEE 802.3x and half duplex backpressure flow control
4 PoE ports with Power Sourcing Equipment (PSE) operation
Auto-detection of PD (powered devices) and automatic power
management
Over-temperature, over-current and over/under-voltage detection
Power Input, +18 ~ +32 VDC
Supports operating temperatures from -40 ~ +75°C
DIN-Rail

### **Specifications**

Models	NS-205PSE-24V	NSM-205PSE-24V		
Technology	<u> </u>	<u>'</u>		
Standards	IEEE 802.3, 802.3u, 802.3x ,802.3af (Power over Ethernet)			
Processing Type	Store & forward; wire speed switching			
MAC Addresses	1024			
Memory Bandwidth	3.2 Gbps			
Frame buffer memory	512 Kbit			
Flow Control	IEEE802.3x flow control, back pressure flow control			
Interface	·			
RJ45 ports	10/100 Base-T(X) auto negotiation speed, F/H duplex mode, and auto MDI/MDI-X connection			
LED Indicators	Power, Link/Act , 10/100M, Power Device is detected			
Ethernet Isolation	1500 Vrms 1 minute			
+/- 6kV EMS Protection	Yes			
Power Input				
Input Voltage Range	+18 ~ +32VDC for PoE output	+18 ~ +32VDC for PoE output		
Power consumption	0.24@ 24 VDC with PoE Off			
Protection	Power reverse polarity protection			
+/- 6kV EMS Protection	Yes			
Connection	3-Pin Removable Terminal Block			
PoE Output (Port1 ~ 4)				
PoE Compliance	100% IEEE 802.3af compliant			
PoE Classification	PSE (Power Sourcing Equipment)			
PoE Voltage	+48 VDC depending on power input			
PoE Power	Up to 15.4 watts per channel			
PoE Operation	Automatic detection and power management			
Mechanical				
Casing	Plastic (Flammability UL 94V-0)	Metal (IP30 Protection)		
Dimensions (W x L x H)	31 mm x 157 mm x 113 mm	25 mm x 168 mm x 119 mm		
Installation	DIN-Rail			
Environmental				
Operating Temperature	-40 °C ~ +75 °C			
Storage Temperature	-40 °C ~ +85 °C			
Ambient Relative Humidity	10% ~ 90% RH, non-condensing			

#### **LED Indicator Functions:**

LED	Color	Description
Power	Red On	Power is On
	Red Off	Power is Off
Port1 ~ 4	Orange On	Power Device is detected
	Green On	Link/Act
Port5	Yellow On	Link to 100 Mbps
	Green On	Link/Act

#### Pin Function for Terminal Block:

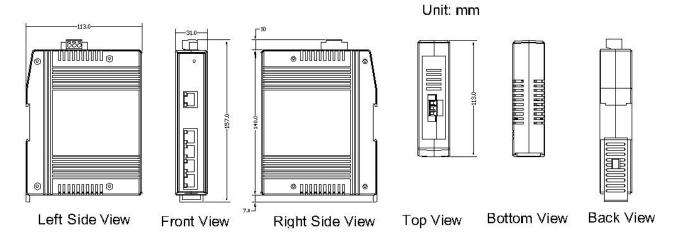
External power supply is connected using the removable terminal block:

**PWR**: Power input (+18 ~ +32 VDC) and should be connected to the power supply (+)

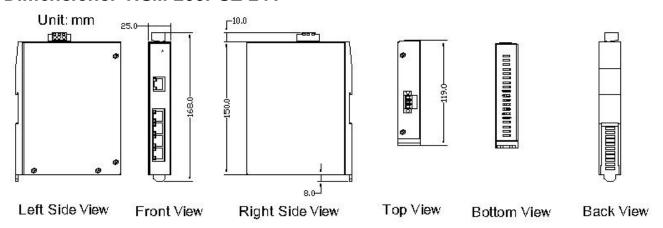
**GND**: Ground and should be connected to the power supply (-)

**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.

#### Dimensions: NS-205PSE-24V



#### Dimensions: NSM-205PSE-24V



#### Ordering information

NS-205PSE-24V CR	Unmanaged 5-Port 10/100 Mbps PoE(PSE) Ethernet Switch; 24 VDC Input
NSM-205PSE-24V CR	Unmanaged 5-Port 10/100 Mbps PoE(PSE) Ethernet Switch with Metal Casing;
	24 VDC Input