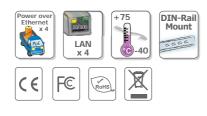


# NS-205PSE-24V/NSM-205PSE-24V

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

## Highlight Information >>>>





## • 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  $V_{\text{DC}}$  to 48  $V_{\text{DC}}$  boost for PoE application where 48  $V_{\text{DC}}$  power supply is not available.

### • Features

- Automatic MDI/MDI-X crossover for plug-and-play
- Each port supports both 10/100 Mbps speed auto
- negotiation Store-and-forward architecture
- Full duplex IEEE 802.3x and half duplex backpressure flow control
- 3.2 Gbps high performance memory bandwidth
- Power Inputs +18 V<sub>DC</sub> ~ +32 V<sub>DC</sub>

- Supports operating temperatures from -40 °C ~ +75 °C
- DIN-Rail
- IEEE 802.3af compliant PoE ports
- 4-PoE Port 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

## Specifications

| Models                          | NS-205PSE-24V   | NSM-205PSE-24V          |  |
|---------------------------------|---|-------------------------|--|
| Technology                      |   |                         |  |
| 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                    | IEEE 802.3x flow control, back pressure flow control                                    |                         |  |
| Interface                       |   |                         |  |
| RJ-45 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  |                         |  |
| +/-6 kV EMS Protection          | Yes   |                         |  |
| Power Input                     |   |                         |  |
| Input Voltage Range             | +18 ~ +32 V <sub>DC</sub> for PoE output  |                         |  |
| Power Consumption               | 0.24 @ 24 V <sub>DC</sub> without PD loading  |                         |  |
| Protection                      | Power reverse polarity protection   |                         |  |
| Frame Ground for EMS Protection | Yes   |                         |  |
| Connection                      | 3-Pin Removable Terminal Block  |                         |  |
| PoE Output                      |   |                         |  |
| PoE Compliance                  | 100% IEEE 802.3af compliant   |                         |  |
| PoE Classification              | PSE (Power Sourcing Equipment)  |                         |  |
| PoE Voltage                     | +48 V <sub>DC</sub> 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 Functions

| LED Indicator Functions |           |                          |  |  |
|-------------------------|-----------|--------------------------|--|--|
| LED                     | Color     | Description              |  |  |
| Power                   | Red On    | Power is On              |  |  |
|                         | Red Off   | Power is Off             |  |  |
| Port 1 ~ Port 4         | Orange On | Power Device is detected |  |  |
|                         | Green On  | Link/Act                 |  |  |
| Port 5                  | Yellow On | Link to 100 Mbps         |  |  |
|                         | Green On  | Link/Act                 |  |  |

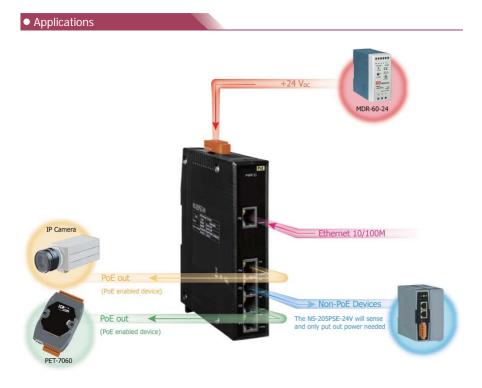
## Pin Function for Terminal Block

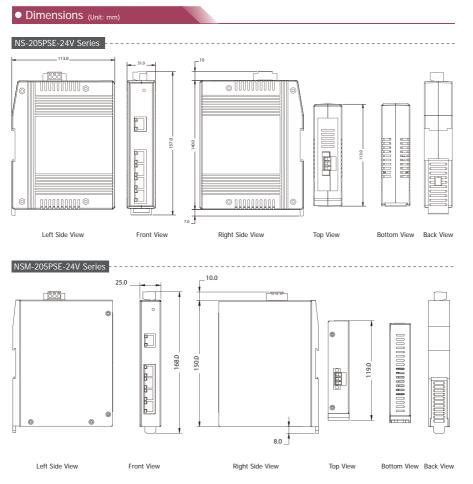
External power supply is connected using the removable terminal block:

PWR : Power input (+18  $V_{DC}$   $\sim$  +32  $V_{DC})$  and should be connected to the power supply (+)

 $\ensuremath{\textbf{GND}}\xspace$  : 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.





## • Ordering Information

| NS-205PSE-24V CR  | Unmanaged 5-Port 10/100 Mbps PoE(PSE) Ethernet Switch; 24 VDC Input (RoHS)                   |
|-------------------|--|
| NSM-205PSE-24V CR | Unmanaged 8-Port Industrial 10/100 Mbps PoE(PSE) Ethernet Switch with Metal<br>Casing (RoHS) |

#### Accessories

| MDR-60-24 | 24V/2.5A, 60 W Power Supply with DIN-Rail Mounting  |
|-----------|---|
| MDR-20-24 | 24V/1.0A, 24 W Power Supply with DIN-Rail Mounting  |
| DIN-KA52F | 24V/1.04A, 25 W Power Supply with DIN-Rail Mounting |