# NSM-108/NS-208

## Unmanaged 8-Port Industrial 10/100 Mbps Ethernet Switch



#### Introduction

The NSM-108/NS-208 has 8 Ethernet Switching ports that support10/100 Base-T(X) with a 10/100M auto-negotiation feature and auto MDI/MDIX function. It can connect 8 workstations and automatically Switches the transmission speed (10/100 Mbps) for corresponding connections. The flow control mechanism is also negotiated.

LEDs embedded in RJ-45 jacks make for easy monitoring. Port connectors are shielded RJ-45. A power source for +12~+48 VDC is required.

#### **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
- Supports +12 ~ +48V DC voltage
- Supports operating temperatures from -40 ~ +75 °C
- Support DIN-Rail and Wall Mounting(NSM-108 only)

### **Specifications**

| Models                    | NS-208  | NSM-108                            |  |
|---------------------------|---|------------------------------------|--|
| Technology                | ,   |                                    |  |
| Standards                 | IEEE 802.3, 802.3u, 802.3x  |                                    |  |
| Processing Type           | Store & forward; wire speed switching   |                                    |  |
| MAC Addresses             | 2048  |                                    |  |
| Frame Buffer Memory       | 768 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  |                                    |  |
| Ethernet Isolation        | 1500 Vrms 1 minute  |                                    |  |
| EMS Protection            | Yes   |                                    |  |
| Power Input               |   |                                    |  |
| Input Voltage Range       | +12 ~ +48 VDC (Non-isolated)  |                                    |  |
| Power Consumption         | 0.15 A @ 24 VDC   |                                    |  |
| Protection                | Power reverse polarity protection   |                                    |  |
| EMS Protection            | Yes   |                                    |  |
| Connector                 | 5-Pin Removable Terminal Block  |                                    |  |
| Mechanical                |   |                                    |  |
| Casing                    | Plastic   | Metal                              |  |
| Dimensions (W x L x H)    | 64 mm x 98 mm x 118 mm  | 73 mm x 102 mm x 132 mm            |  |
| Installation              | DIN-Rail Mounting   | DIN-Rail Mounting or Wall Mounting |  |
| Environment               |   |                                    |  |
| Operating Temperature     | -40 °C ~ +75 °C   |                                    |  |
| Storage Temperature       | -40 °C ~ +85 °C   |                                    |  |
| Ambient Relative Humidity | 10% ~ 90% RH, non-condensing  |                                    |  |

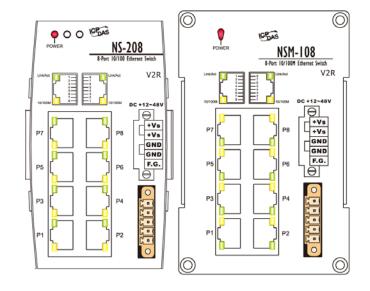
Note: This table only use for "V2R" version, version information please reference product front

### **LED Indicator Functions**

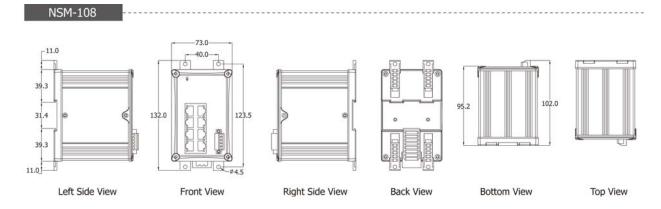
| LED           | Color      | Description      |
|---------------|------------|------------------|
| Power         | Red On     | Power is On      |
| Power         | Red Off    | Power is Off     |
|               | Green On   | Link/Act         |
| Ethernet Port | Green Off  | Not Networking   |
| Ethernet Port | Yellow On  | Link to 100 Mbps |
|               | Yellow Off | Link to 10 Mbps  |

## Pin assignment

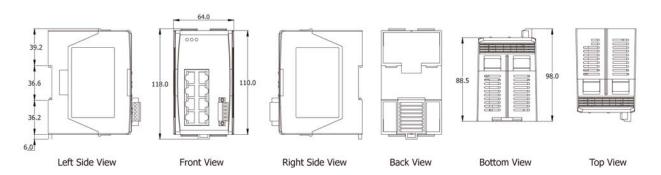
| Pin  | Terminal No. | Function      |
|------|--------------|---------------|
| +VS  |              | +12 ~ +48 VDC |
| +VS  |              |               |
| GND  |              | Power Ground. |
| GND  |              |               |
| F.G. |              | Frame Ground. |



## **Dimensions**







#### **Accessories**

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