# NSM-208G/NS-208G/NSM-208AG/NS-208AG 8-Port Industrial 10/100/1000 Mbps Ethernet Switch



#### Introduction:

The NS-208G/NSM-208G has 8 Ethernet Switching ports that support 10/100/1000 Base-T, with a 10/100/1000M auto negotiation feature and auto MDI/MDI-X function. It can connect 8 workstations and automatically switches the transmission speed (10 Mbps or 100 Mbps or 1000 Mbps) for corresponding connections.

The flow control mechanism is also negotiated. There is link/data rate LEDs for each port to aid troubleshooting. Port connectors are shielded RJ-45.

NS-208AG/NSM-208AG is exactly the same as NS-208G/NSM-208G except for the power input.

### Features:

- Automatic MDI/MDI-X crossover for plug-and-play
- Each port supports both 10/100 and 1000 Mbps speed auto negotiation
- Store-and-forward architecture
- NS-208G/NSM-208G Power Inputs +10 ~ +30V DC
- NS-208AG/NSM-208AG Power Inputs +12 ~ +48V DC
- Supports operating temperatures from −40 ~ +75 °C
- DIN rail mount and Screw hole for wall mounting kit (Wall mounting kit only for NSM-208G/NSM-208AG)

# Specifications:

- Compatibility: IEEE 802.3, 802.3u, 802.3ab and 802.3x
- 16 Gbps high performance memory bandwidth
- 8192 MAC Address Table Size
- Frame buffer memory: 1 Mbit
- 9K Jumbo Frames only for 1000 Base-T
- Interface: 10/100/1000 Base-T
- Port: 10/100/1000 Mbps x 8 (Shielded RJ-45 Jack)
- Provides LEDs for network and power monitoring
- Cables:

Ethernet: 2-pair UTP/STP Cat.3,4,5, EIA/TIA-568 100-ohm Fast Ethernet: 2-pair UTP/STP Cat. 5, EIA/TIA-568 100-ohm Gigabit Ethernet: 4-pair UTP/STP Cat.5, EIA/TIA-568 100-ohm

Environment:

Operating temperature:  $-40 \sim +75 \,^{\circ}\text{C}$ Storage Temperature:  $-40 \sim +75 \,^{\circ}\text{C}$ 

Relative Humidity: 10% to 90% non-condensing

• Power requirements:

NS-208G/NSM-208G = +10 ~ 30 VDC (Removable Terminal Block) NS-208AG/NSM-208AG = +12 ~ 48VDC (Removable Terminal Block)

Power consumption: 0.3A@24 VDC.

### LED functions:

Standard RJ45 female connectors are provided. A standard RJ45 plug cable is all that is necessary to connect your device to the unit since switch that supports auto crossover. Table shows the LED indicator functions. The module includes an internal.

#### **Table**

LED	Color	Description	
Power	Red On	Power is On	
	Red Off	Power is Off	
Ethernet Port	Orange On	Link to 1000 Mbps	
	Green On	Link to 1000 Mapo	
	Only Orange On	Link to 100 Mbps	
	Only Green On	Link to 10 Mbps	

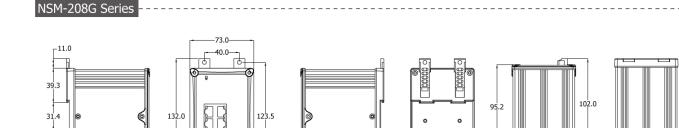
#### Pin-Out:

Pin#	Signal Name	Function
1	BI_DA+	Bi-directional pair +A
2	BI_DA-	Bi-directional pair -A
3	BI_DB+	Bi-directional pair +B
4	BI_DC+	Bi-directional pair +C
5	BI_DC-	Bi-directional pair -C
6	BI_DB-	Bi-directional pair -B
7	BI_DD+	Bi-directional pair +D
8	BI_DD-	Bi-directional pair -D

**Bottom View** 

Top View

## **Dimensions:** (Unit:mm)



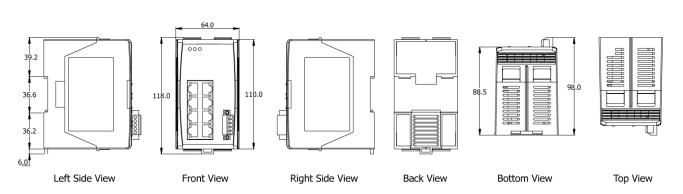
Right Side View

**Back View** 



Left Side View

11.0



### Pin Function For Terminal Block:

External power supply is connected using the removable terminal block:

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

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

Front View

**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.