

# NS-208

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



### **Introduction:**

The NS-208 has 8 Ethernet Switching ports that support 10/100Base-T, with a 10/100M auto-negotiation feature and auto MDI/MDIX function.

It can connect 8 workstations and automatically switches the transmission speed (10 Mbps or 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 +10~+30VDC 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
- 2 Gbps high performance memory bandwidth.
- Supports +10 ~ +30V DC voltage
- Supports operating temperatures from -30 ~ +75 °C
- DIN rail mount for industrial usage

### **Specifications:**

- Compatibility: IEEE 802.3, IEEE802.3u, IEEE802.3x
- Interface: 10/100 Base-T
- Port: 10/100 Mbps x 8 (Shielded RJ-45 Jack)
- Provides LEDs for network and power monitoring
- ESD Protection:
  - 8KV Contact Discharge
  - 15KV Air-Gap Discharge
- Cables:
  - 10 Base-T (Cat.3, 4,5 UTP cable; 100m Max.)
  - 100 Base-T (Cat.5 UTP cable; 100m Max.)
- Environment:
  - Operating temperature: -30 ~ +75 °C
  - Storage Temperature: -40 ~ +85 °C
  - Relative Humidity: 10% to 90% non-condensing
- Dimensions: 64 x 110 x 97.5 mm (W x H x D)
- Power requirements: +10 to +30V DC (Removable Terminal Block)
- Power consumption: 0.15A@24VDC, +/- 5% arrowed with 10M Full duplex.  
0.09A@24VDC, +/- 5% arrowed with 100M Full duplex.

### 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 1 shows the LED indicator functions. The module includes an internal.

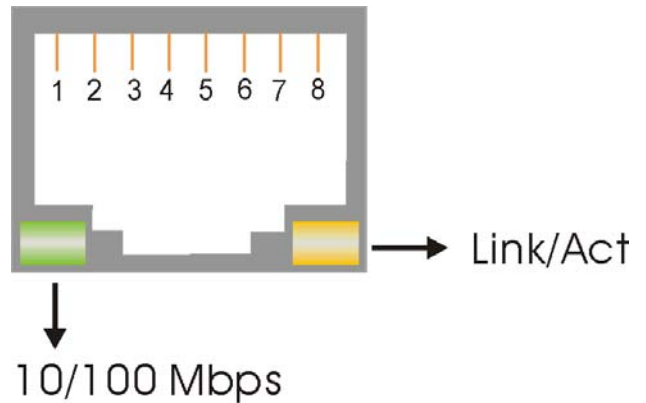
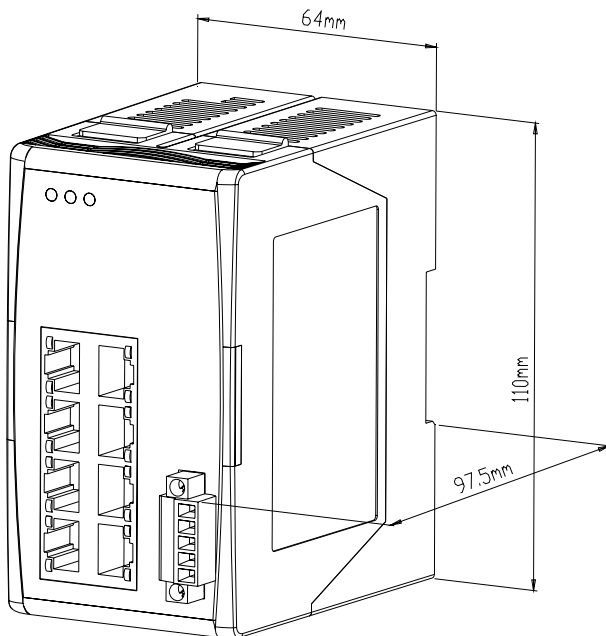
Table 1

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

### Pin-Out:

Pin#	Signal Name	Function
1	TD+	Transmit Data
2	TD+	Transmit Data
3	RD+	Receive Data
4	NC	No Connection
5	NC	No Connection
6	RD-	Receive Data
7	NC	No Connection
8	NC	No Connection

**Dimensions:** 64 x 110 x 97.5 mm(W x H x D)



### Checking Power:

Since the NS-208 consumes 3.6 W, ensure that your power supply is able to meet this demand. The Input voltage range is +10~+30VDC.

### Pin Function For Terminal Block:

External power supply is connected using the removable terminal block:

**+Vs** : Power input +10 to +30V

**GND** : Ground

**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.