

# NS-205R

## Industrial 5-Port 10/100 Mbps Ethernet Switch with Conformal Coating



### **Introduction:**

The NS-205R has 5 Ethernet Switching ports that support 10/100Base-T(X), with a 10/100M auto-negotiation feature and auto MDI/MDI-X function.

It can connect 5 workstations and automatically switches the transmission speed (10 Mbps or 100 Mbps) for corresponding connections. The flow control mechanism is also negotiated.

NS-205R is designed especially for mission critical and harsh environmental applications since it comes ready with conformal coating

### **Features:**

- Full duplex IEEE 802.3x flow control
- Supports 4 kV Ethernet ESD protection
- Supports +10 ~ 36V DC voltage
- Supports operating temperatures from -40 ~ +75 °C
- DIN-Rail

### **Specifications:**

<b>Technology</b>	
Standards	IEEE802.3, 802.3u, 802.3x
Processing Type	Store & forward, wire speed switching
MAC Addresses	1024
Memory Bandwidth	1.4 Gbps
Frame Buffer Memory	256 Kbit
Flow Control	IEEE802.3x flow control
<b>Interface</b>	
RJ45 ports	10/100 BaseTX auto negotiation speed, F/H duplex mode, and auto MDI/MDI-X connection
LED Indicators	Power, 10/100M, Link/Act
Ethernet Isolation	1500 Vrms 1 minute
Frame Ground for EMS Protection	Yes
Cable	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
<b>Power</b>	
Input Voltage Range	+10 ~ +36VDC (Non-isolation)
Power consumption	0.1A@24VDC, +/- 5% arrowed with 10M Full duplex. 0.09A@24VDC, +/- 5% arrowed with 100M Full duplex
Protection	Power reverse polarity protection
Frame Ground for EMS Protection	Yes
Connection	3-Pin Removable Terminal Block
<b>Mechanical</b>	
Casing	Plastic
Flammability	UL 94V-0
Dimensions	33 mm x 78 mm x 107 mm (W x L x H)
Installation	DIN-Rail
<b>Environmental</b>	
Operating Temperature	-40 ~ +75 °C
Storage Temperature	-40 ~ +85 °C
Ambient Relative Humidity	10% to 90% HR, non-condensing

## LED functions:

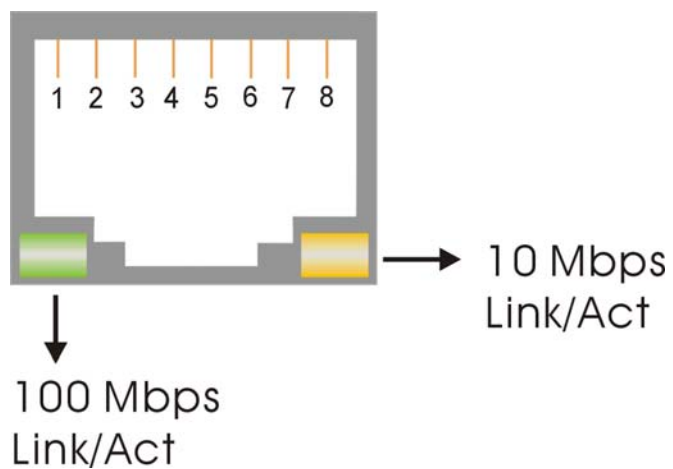
Standard RJ45 female connectors are provided. A standard RJ45 plug cable is all that is necessary to connect your device to the unit since switch that supports auto crossover. Table shows the LED indicator functions. The module includes an internal.

Table

LED	Color	Description
Power	Red	Power is On
	Off	Power is Off
10/100M (Port 1)	Yellow	Link to 10 Mbps
	Green	Link to 100 Mbps
	Off	Not Networking
10/100M (Port 2)	Yellow	Link to 10 Mbps
	Green	Link to 100 Mbps
	Off	Not Networking
10/100M (Port 3)	Yellow	Link to 10 Mbps
	Green	Link to 100 Mbps
	Off	Not Networking
10/100M (Port 4)	Yellow	Link to 10 Mbps
	Green	Link to 100 Mbps
	Off	Not Networking
10/100M (Port 5)	Yellow	Link to 10 Mbps
	Green	Link to 100 Mbps
	Off	Not Networking

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



## Pin Function For Terminal Block:

External power supply is connected using the removable terminal block:

**+Vs** : Power input (+10 ~ +36V) 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:

