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 $^{\circ}\mathrm{C}$
- DIN-Rail

Specifications:

| Technology | | | |
|---------------------------------|--|--|--|
| 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 | | |
| Interface | | | |
| 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 | | |
| Cable | Fast Ethernet : 2-pair UTP/STP Cat. 5, EIA/TIA-568 100-ohm | | |
| Power | | | |
| 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 | | |
| Mechanical | | | |
| Casing | Plastic | | |
| Flammability | UL 94V-0 | | |
| Dimensions | 33 mm x 78 mm x 107 mm (W x L x H) | | |
| Installation | DIN-Rail | | |
| Environmental | | | |
| Operating Temperature | -40 ~ +75 °C | | |
| Storage Temperature | -40 ~ +85 °C | | |
| Ambient Relative Humidity | 10% to 90% HR, non-condensing | | |



LED functions:

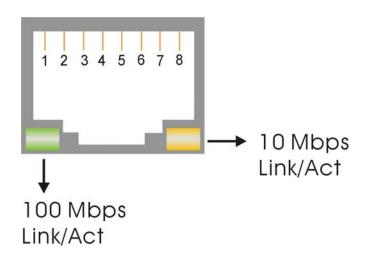
Standard RJ45 female connectors are provided. A standard RJ45 plug cable is all that is necessary to connect your device to the unit since switch that supports auto crossover. Table shows the LED indicator functions. The module includes an internal.

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:

