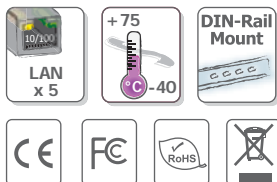


NS-205A

Unmanaged 5-Port Industrial 10/100 Mbps Ethernet Switch

Highlight Information ▶▶▶▶



• Introduction

The NS-205A has 5 Ethernet Switching ports that support 10/100 Base-TX, 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. There is activity/link/data rate LEDs for each port to aid trouble-shooting. Port connectors are shielded RJ-45. It contains "soft start" function with overload protection, high-low voltage protection. The width of the NS-205A is just 33 mm, so it can be used where space is important.

The NS-205A provides +12 ~ 56 V_{DC} power input to fit various power sources.

• 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 4 kV Ethernet ESD protection and 1 kV EFT protection
- Provides ESD protection 4 kV, EFT protection 3 kV and Surge protection 2 kV for power line
- Power Input, +12 V_{DC} ~ +56 V_{DC}
- Operating Temperatures, -40 °C ~ +75 °C
- Slim packaging fits on your DIN-Rail

• Specifications

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Unmanaged Ethernet Switches

NS-205A

| | |
|---------------------------------|---|
| Models | NS-205A |
| Technology | |
| Standards | IEEE802.3, 802.3u, 802.3x |
| Processing Type | Store & forward; wire speed switching |
| MAC Addresses | 1024 |
| Memory Bandwidth | 3.2 Gbps |
| Frame Buffer Memory | 512 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 V _{rms} 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 |
| Redundant Power | |
| Input Voltage Range | +12 ~ +56 V _{DC} (Non-isolated) |
| Power Consumption | 0.1 A@ 24 V _{DC} |
| 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 (W x L x H) | 33 mm x 78 mm x 107 mm |
| Installation | DIN-Rail |
| Environment | |
| Operating Temperature | -40 °C ~ +75 °C |
| Storage Temperature | -40 °C ~ +85 °C |
| Ambient Relative Humidity | 10% ~ 90% RH, non-condensing |

• LED Functions

LED Indicator Functions

| LED | Color | Description |
|-----------------|------------|----------------|
| Power | Red On | Power is On |
| | Red Off | Power is Off |
| Port 1 ~ Port 4 | Orange On | - |
| | Green On | Link/Act |
| Port 5 | Orange On | Speed 100 Mbps |
| | Orange Off | Speed 10 Mbps |
| | Green On | Link/Act |

• Pin Function for Terminal Block

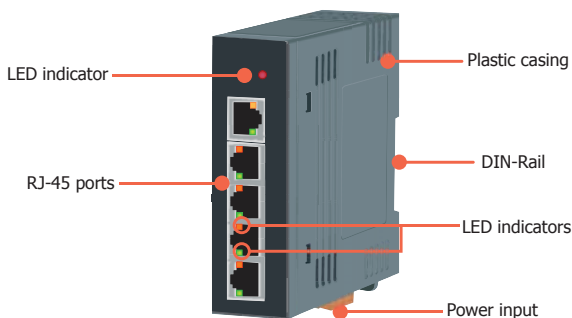
External power supply is connected using the removable terminal block:

+Vs: Power input (+12 ~ 56 V_{DC}) and should be connected to the power supply (+)

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

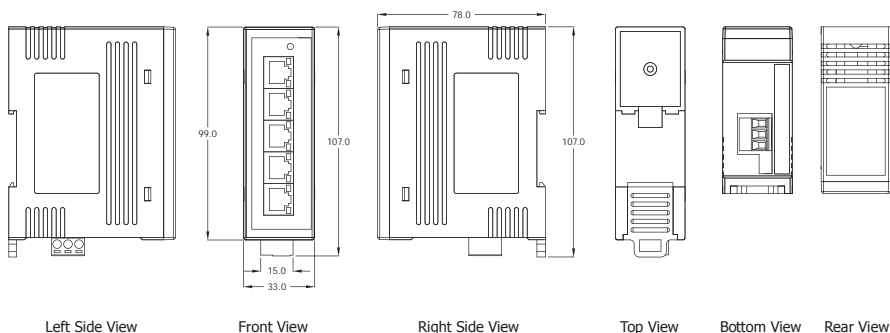
F.G.: F.G. stands for Frame Ground (protective ground). It is optional. If you use this pin, it can reduce EMI radiation; improve EMI performance and ESD protection.

• Applications



Dimensions (Unit: mm)

NS-205A



• Ordering Information

| | |
|------------|---|
| NS-205A CR | Unmanaged 5-Port Industrial Ethernet Switch with Power Input +12 V _{DC} ~ +56 V _{DC} (RoHS) |
|------------|---|

• Accessories

| | |
|-----------------|--|
| GPSU06U-6 CR | 24 V/0.25 A, 6 W Power Supply (RoHS) |
| DIN-KA52F CR | 24 V/1.04 A, 25 W Power Supply with DIN-Rail Mounting (RoHS) |
| MDR-20-24 CR | 24 V/1 A, 24 W Power Supply with DIN-Rail Mounting (RoHS) |
| DIN-KA52F-48 CR | 48 V/0.52 A, 25 W Power Supply with DIN-Rail Mounting (RoHS) |
| MDR-60-48 CR | 48 V/1.25 A, 60 W Power Supply with DIN-Rail Mounting (RoHS) |

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Unmanaged Ethernet Switches

NS-205A