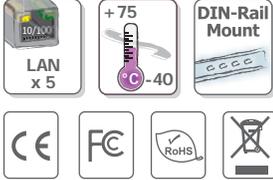


NS-205A

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 provide +12 ~ 56 V_{DC} power input to fit various power source.

• 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

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

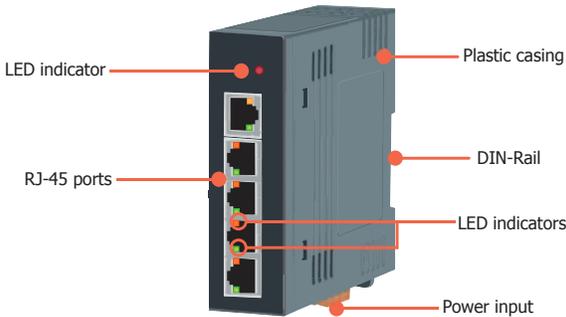
External power supply is connected using the removable terminal block:

+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 (-)

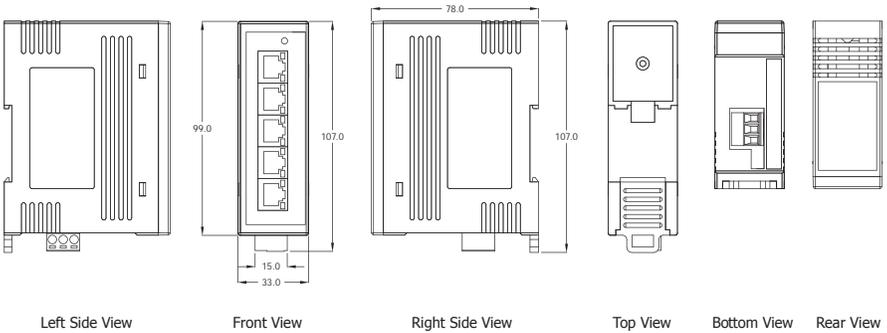
F.G.: F.G. stands for Frame Ground (protective ground). It is optional. If you use this pin, it can reduce EMI radiation; improve EMI performance and ESD protection.

• 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)
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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)