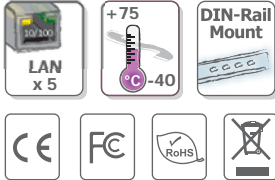


NS-205 Series

Unmanaged 5-Port Industrial Ethernet Switch

Highlight Information ▶▶▶



● Introduction

The NS-205 series 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-205 is just 33 mm, so it can be used where space is important.

● 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
- Integrated look-up engine with dedicated 1024 unicast MAC addresses
- Store-and-forward architecture
- Supports +10 V_{oc} ~ +30 V_{oc} Reverse Polarity Protection
- Supports operating temperatures from -40 °C ~ +75 °C
- DIN-Rail

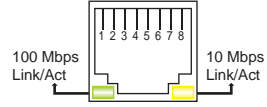
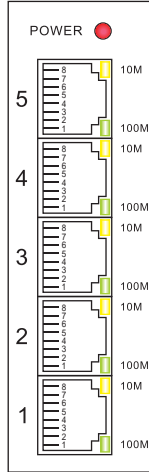
● Specifications

Technology	
Standards	IEEE 802.3, 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	IEEE 802.3x flow control, back pressure flow control
Interface	
RJ-45 Ports	10/100 Base-TX auto negotiation speed, F/H duplex mode, and auto MDI/MDI-X connection
LED Indicators	Power, 10/100M, Link/Act
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 Ω
	Fast Ethernet: 2-pair UTP/STP Cat. 5, EIA/TIA-568 100 Ω
Power	
Input Voltage Range	+10 V _{DC} ~ +30 V _{DC} (Non-isolation)
Power Consumption	0.1 A @ 24 V _{DC} , +/-5% arrowed with 10M Full duplex
	0.09 A @ 24 V _{DC} , +/-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 °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
PWR	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



RJ-45 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

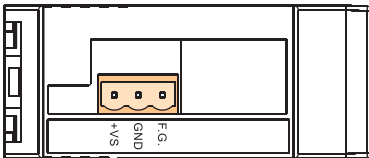
Pin Function for Terminal Block

External power supply is connected using the removable terminal block:

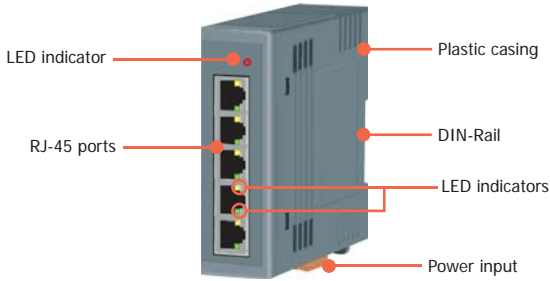
+Vs : Power input (+10 V_{DC} ~ +30 V_{DC}) and should be connected to the power supply (+)

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

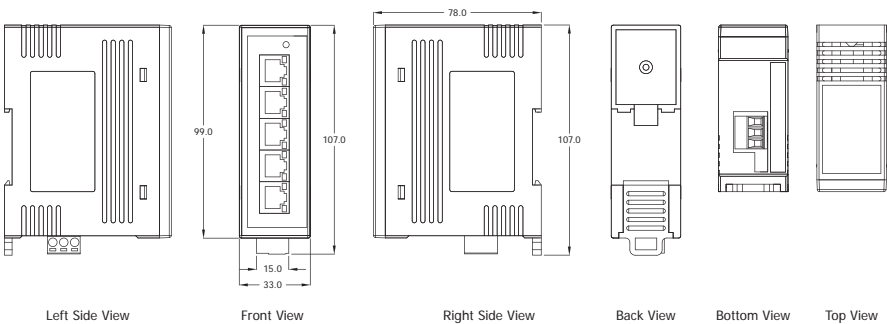
F.G. : F.G. stands for Frame Ground (protective ground). It is optional. If you use this pin, it can reduce EMI radiation; improve EMI performance and ESD protection.



● Appearance



● Dimensions (Unit: mm)



● Ordering Information

NS-205	Unmanaged 5-Port Industrial Ethernet Switch
NS-205 CR	Unmanaged 5-Port Industrial Ethernet Switch (RoHS)
NS-205A CR	Unmanaged 5-Port Industrial Ethernet Switch with Power Input +12 V _{DC} ~ +48 V _{DC} (RoHS)

● Accessories

GPSU06-6	24V/0.25A, 6 W Power Supply
KWM020-1824F	24V/0.75A, 18 W Power Supply
DIN-KA52F	24V/1.04A, 25 W Power Supply with DIN-Rail Mounting