NS-208/NSM-108 Series

Unmanaged 8-Port Industrial 10/100 Base-TX Ethernet Switch

Highlight Information ▶▶▶▶

NS-208/NSM-108 Series

CE FC RoHS

LAN x 8   +75 °C -40

NEW

NSM-108 Series   NS-208 Series

For NSM-108 Series

Wall & DIN-Rail Mount

For NS-208 Series

DIN-Rail Mount
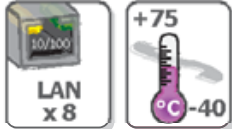
● Introduction

The NS-208/NSM-108 series has 8 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 8 workstations and automatically switches the transmission speed (10 Mbps or 100 Mbps) for corresponding connections.

The flow control mechanism is also negotiated. There is link/data rate LEDs for each port to aid trouble-shooting. Port connectors are shielded RJ-45.

● 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
- 2 Gbps high performance memory bandwidth
- Power Inputs +10 V_{DC} ~ +30 V_{DC}
- Supports operating temperatures from -40 °C ~ +75 °C
- DIN-Rail

● Specifications

Models	NS-208	NSM-108
Technology		
Standards	IEEE 802.3, 802.3u, 802.3x	
Processing Type	Store & forward, wire speed switching	
MAC Addresses	1024	
Memory Bandwidth	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-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	0.15 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	5-Pin Removable Terminal Block	5-Pin Removable Terminal Block
Mechanical		
Casing	Plastic (Flammability UL 94V-0)	Metal (IP20 Protection)
Dimensions (W x L x H)	64 mm x 98 mm x 118 mm	73 mm x 102 mm x 132 mm
Installation	DIN-Rail	DIN-Rail or Wall Mounting
Environmental		
Operating Temperature	-40 °C ~ +75 °C	
Storage Temperature	-40 °C ~ +85 °C	
Ambient Relative Humidity	10% ~ 90% RH, non-condensing	

Unmanaged Ethernet Switches   NS-208/NSM-108 Series

Unmanaged Ethernet Switches   NS-208/NSM-108 Series

● LED Functions

LED Indicator Functions

LED	Color	Description
Power	Red On	Power is On
	Red Off	Power is Off
Ethernet Port	Green On	Link/Act
	Green Off	Not Networking
	Yellow On	Link to 100 Mbps
	Yellow Off	Link to 10 Mbps
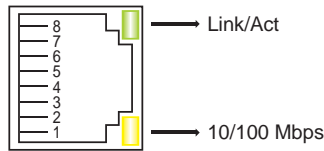
RJ-45 Pin-Out

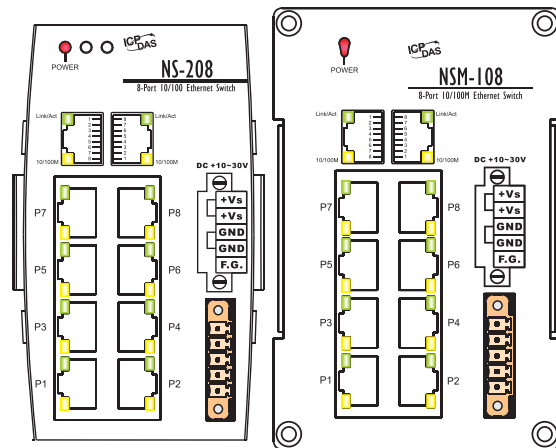| Pin#	Signal Name	Function
1	TD+	Transmit Data
2	TD-	Transmit Data
3	RD+	Receive Data
4	NC	No Connection
5	NC	No Connection
6	RD-	Receive Data
7	NC	No Connection
8	NC	No Connection

● Pin Function for Terminal Block

External power supply is connected using the removable terminal block:

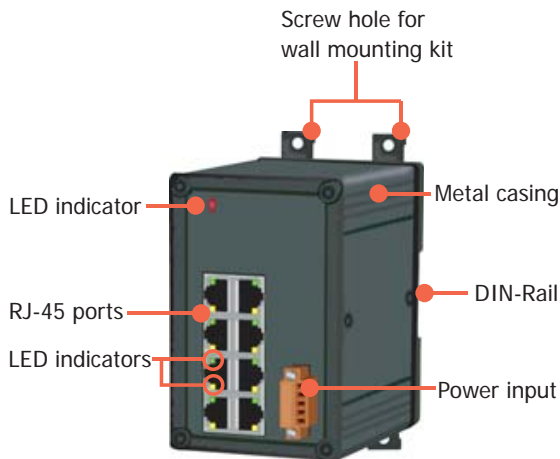**+Vs** : Power input +10 V_{DC} ~ +30 V_{DC}
GND: Ground
F.G. : F.G. stands for Frame Ground (protective ground). It is optional. If you use this pin, it can reduce EMI radiation; improve EMI performance and ESD protection.
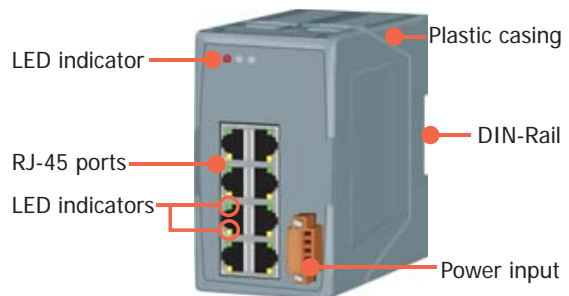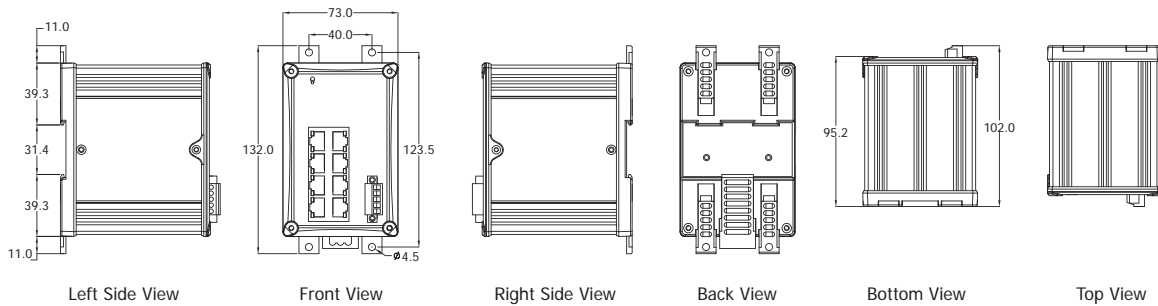

● Appearance
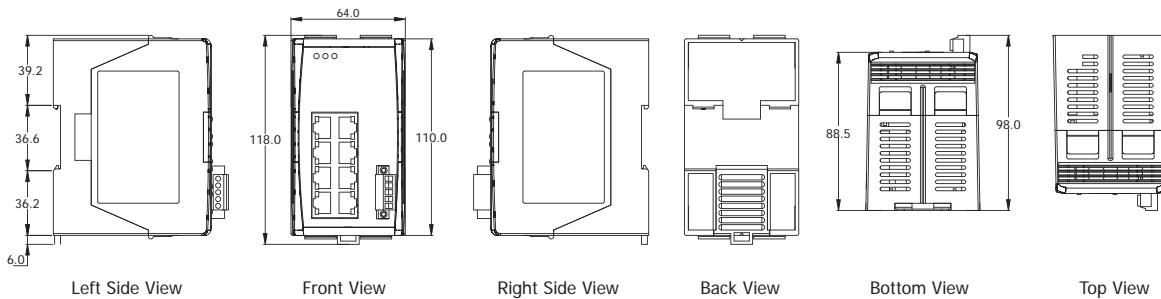
NSM-108 Series

NS-208 Series

● Dimensions (Unit: mm)

NSM-108 Series

| Left Side View | Front View | Right Side View | Back View | Bottom View | Top View |

NS-208 Series

| Left Side View | Front View | Right Side View | Back View | Bottom View | Top View |

● Ordering Information

NS-208 CR	Unmanaged 8-Port Industrial 10/100 Base-TX Ethernet Switch with Power Input +10 V_{DC} ~ +30 V_{DC} (RoHS)
NSM-108 CR	Unmanaged 8-Port Industrial 10/100 Base-TX Ethernet Switch with Power Input +10 V_{DC} ~ +30 V_{DC}, metal casing (RoHS)
NS-208A CR	Unmanaged 8-Port Industrial 10/100 Base-TX Ethernet Switch with Power Input +12 V_{DC} ~ +48 V_{DC} (RoHS)
NSM-108A CR	Unmanaged 8-Port Industrial 10/100 Base-TX Ethernet Switch with Power Input +12 V_{DC} ~ +48 V_{DC}, metal casing (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