

# NS-208/NSM-108 Series

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

# Highlight Information ▶▶▶▶

NS-208/NSM-108 Series













For NSM-108 Series



For NS-208 Series





NSM-108 Series







#### 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 troubleshooting. 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 Vpc ~ +30 Vpc
- Supports operating temperatures from -40 °C ~ +75 °C
- DIN-Rail

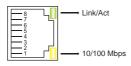
# Specifications

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 <sub>rms</sub> 1 minute	
Frame Ground for EMS Protection	Yes	
Cable	Ethernet: 2-pair UTP/STP Cat.3, 4, 5, EIA/TIA-568 100 Ω	
Cable	Fast Ethernet: 2-pair UTP/STP Cat. 5, EIA/TIA-568 100 Ω	
Power		
Input Voltage Range	+10 Vpc ~ +30 Vpc (Non-isolation)	
Power Consumption	0.15 A @ 24 Vpc, +/-5% arrowed with 10M Full duplex	
rower consumption	0.09 A @ 24 Vpc, +/-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	



#### 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		

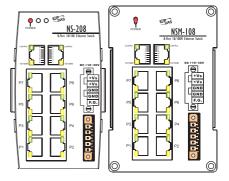
#### • Pin Function for Terminal Block

External power supply is connected using the removable terminal block:

+Vs : Power input +10  $V_{DC} \sim +30 V_{DC}$ 

GND: Ground

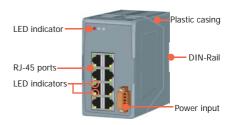
F.G.: F.G. stands for Frame Ground (protective ground). It is optional. If you use this pin, it can reduce EMI radiation; improve EMI performance and ESD protection.



#### **Appearance**

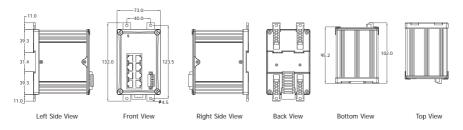


#### NS-208 Series

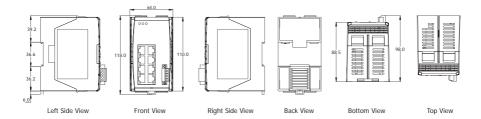


# • Dimensions (Unit: mm)

#### NSM-108 Series



#### NS-208 Series



## Ordering Information

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