

NS-208G/NSM-208G Series

Unmanaged 8-Port Industrial 10/100/1000 Base-T Ethernet Switch

Highlight Information NS-208G/NSM-208G Series NSM-208G Series NS-208G Series ((FC O +75 GEE LAN 40 x 8 For NSM-208G Series Wall & DIN-Rail Mount For NS-208G Series DTN-Rail Mount 000

Introduction

The NS-208G/NSM-208G series has 8 Ethernet Switching ports that support 10/100/1000 Base-T, with a 10/100/1000M 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 or 1000 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 10/100 and 1000 Mbps speed auto negotiation
- Store-and-forward architecture
- Full duplex IEEE 802.3x and half duplex backpressure flow control
- 16 Gbps high performance memory bandwidth
- Power Inputs +10 Vpc ~ +30 Vpc
- Supports operating temperatures from -40 °C ~ +75 °C
- DIN-Rail

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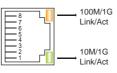
Specifications

Models	NS-208G	NSM-208G
Technology		
Standards	IEEE 802.3, 802.3u, 802.3ab and 802.3x	
Processing Type	Store & forward, wire speed switching	
MAC Addresses	8192	
Memory Bandwidth	16 Gbps	
Frame Buffer Memory	1 Mbit	
Jumbo Frames	9K for Speed 1000M	
Flow Control	IEEE 802.3x flow control, back pressure flow control	
Interface		
RJ-45 Ports	10/100/1000 Base-T auto negotiation speed, F/H duplex mode, and auto MDI/MDI-X connection	
LED Indicators	Power, 10/100/1000M, 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	
	Gigabit Ethernet: 4-pair UTP/STP Cat.5, EIA/TIA-568 100 Ω	
Power		
Input Voltage Range	$+10 V_{DC} \sim +30 V_{DC}$ (Non-isolation)	
Power Consumption	0.3 A @ 24 V $_{DC}, \ +/-5\%$ arrowed with 1000M Full duplex	
Protection	Power reverse polarity protection	
Frame Ground for EMS Protection	Yes	
Connection	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 ~ +75 °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	Orange On	Link to 1000 Mbps		
	Green On			
	Only Orange On	Link to 100 Mbps		
	Only Green On	Link to 10 Mbps		



• Pin Function for Terminal Block

External power supply is connected using the removable terminal block:

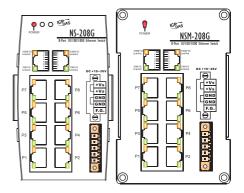
+Vs : Power input (+10 VDc ~ +30 VDc) and should be connected to the power supply (+)

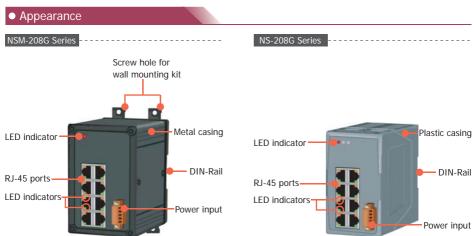
GND: Ground and should be connected to the power supply (-)

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.

RJ-45 Pin-Out				
Pin#	Signal Name	Function		
1	BI_DA+	Bi-directional pair +A		
2	BI_DA-	Bi-directional pair -A		
3	BI_DB+	Bi-directional pair +B		
4	BI_DC+	Bi-directional pair +C		
5	BI_DC-	Bi-directional pair -C		
6	BI_DB-	Bi-directional pair -B		
7	BI_DD+	Bi-directional pair +D		
8	BI_DD-	Bi-directional pair -D		

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High Reliability Industrial Ethernet Switch for Rugged Environment



• Ordering Information

NS-208G CR	Unmanaged 8-Port 10/100/1000 Base-T Ethernet Switch with Power Input +10 V_{DC} \sim +30 V_{DC} (RoHS)
NSM-208G CR	Unmanaged 8-Port 10/100/1000 Base-T Ethernet Switch with Power Input +10 V_{DC} \sim +30 V_{DC} metal casing (RoHS)
NS-208AG CR	Unmanaged 8-Port 10/100/1000 Base-T Ethernet Switch with Power Input +12 V_{DC} \sim +48 V_{DC} (RoHS)
NSM-208AG CR	Unmanaged 8-Port 10/100/1000 Base-T Ethernet Switch with Power Input +12 V_{DC} \sim +48 V_{DC} metal casing (RoHS)

• Accessories

KWM020-1824F	24V/0.75A, 18 W Power Supply
DIN-KA52F	24V/1.04A, 25 W Power Supply with DIN-Rail Mounting
MDR-20-24	24V/1A, 24 W Power Supply with DIN-Rail Mounting