# NSM-108/NS-208/NS-208R Unmanaged 8-Port Industrial 10/100 Mbps Ethernet Switch



#### Introduction

The NSM-108/NS-208/NS-208R has 8 Ethernet Switching ports that support10/100 Base-T(X) with a 10/100M auto-negotiation feature and auto MDI/MDIX function. It can connect 8 workstations and automatically Switches the transmission speed (10/100 Mbps) for corresponding connections. The flow control mechanism is also negotiated.

LEDs embedded in RJ-45 jacks make for easy monitoring. Port connectors are shielded RJ-45. A power source for +12~+48 VDC is required.

# 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 Broadcast storm protection (NS-208 & NS-208R only)
- Conformal Coated for harsh railway standards (for NS-208R)

# Specifications

Supports +12 ~ +48	BV DC voltage
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- Supports operating temperatures from -40 ~ +75 °C
- Support DIN-Rail and Wall Mounting(NSM-108 only)

Models	NS-208	NS-208R	NSM-108	
Technology	-			
Standards	IEEE 802.3, 802.3u, 802.3x	IEEE 802.3, 802.3u, 802.3x		
Processing Type	Store & forward			
MAC Addresses	2048	2048		
Frame Buffer Memory	1 Mbit	1 Mbit		
Flow Control	IEEE 802.3x flow control, back p	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 Vrms 1 minute			
EMS Protection	Yes			
DIP Switch	BSP Enable			
Power Input	·			
Input Voltage Range	+12 ~ +48 VDC (Non-isolated)			
Power Consumption	0.08A @ 24 VDC			
Protection	Power reverse polarity protectio	Power reverse polarity protection		
EMS Protection	Yes			
Connector	5-Pin Removable Terminal Block			
Mechanical	·			
Casing	Plastic		Metal	
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 Mounting		DIN-Rail Mounting or Wall	
			Mounting	
Environment				
Operating Temperature	-40 °C ~ +75 °C			
Storage Temperature	-40 °C ~ +85 °C			
Ambient Relative Humidity	10% ~ 90% RH, non-condensing	g		

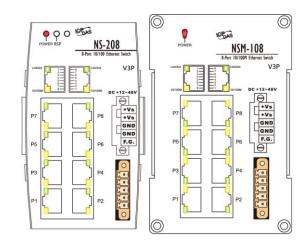
Note: This table only use for "V3P" version , version information please reference product front

# **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

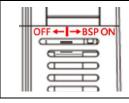
# Pin assignment

Pin	Terminal No.	Function
+VS		+12 ~ +48 VDC
+VS		+12 ~ +40 VDC
GND		Power Ground.
GND		Power Ground.
F.G.		Frame Ground.



### Broadcast storm protection

NS-208 and NS-208R has BSP(Broadcast Storm Protection) Function, this function can protect your Ethernet device disturbed from Broadcast, If switch detection Broadcast packet over 100 par second, Switch will drop the excess part to protect communication.



Dimensions

When the BSP Enable Switch is move the right side, the models will running BSP function after restart the power

Enable Switch move the left or middle will disable BSP function after restart the power

#### NSM-108 73.0 -11.0 40.0 39.3 102.0 95.2 31.4 132.0 123.5 39.3 11.0 -04 Left Side View Front View **Right Side View** Back View Bottom View Top View NS-208/NS-208R 64.0 39.2 **DDB** 88.5 110.0 36.6 118.0 36.2 6.0 Left Side View Top View Front View **Right Side View** Back View Bottom View

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