



Features ▶▶▶

- EN50155-certified for harsh railway standards
- Automatic MDI/MDI-X crossover for plug-and-play
- Store-and-forward architecture
- Full duplex IEEE 802.3x and half duplex backpressure flow control
- Each port supports both 10/100 Mbps speed auto negotiation
- Supports +12 V_{DC} ~ +48 V_{DC} power input
- Supports operating temperatures from -40 °C ~ +75 °C
- DIN-Rail Mounting

Introduction

NS-208R Ethernet switch is designed for industrial applications, such as rolling stock, vehicle, and railway applications. The NS-208R is an unmanaged Ethernet switch with 8 x 10/100 Base-T(X) ports which is compliant with EN50155 request.

NS-208R provides a wide +12 V_{DC} ~ +48 V_{DC} power range to fit all the common power standards found in industrial automation, without external power converters. The wide power input lowers installation and maintenance costs.

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.

Comparison Table of 8-port 10/100 Mbps Ethernet Switch

Mode Name	NS-208	NSM-108	NS-208A	NSM-208A	NS-208R
Input Voltage Range	+10 V _{DC} ~ +30 V _{DC}		+12 V _{DC} ~ +48 V _{DC}		
Casing	Plastic	Metal	Plastic	Metal	Plastic
Installation	DIN-Rail Mounting	DIN-Rail Mounting or Wall Mounting		DIN-Rail Mounting	
Dimensions (W x L x H) (Unit: mm)	64 x 98 x 118	73 x 102 x 132	31 x 113 x 157	25 x 119 x 168	64 x 98 x 118
Remarks	-		Cost-effective		EN50155-certified

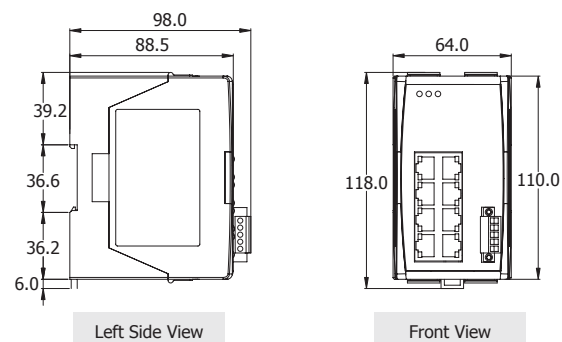
Specifications

Technology	
Standards	IEEE 802.3, 802.3u, 802.3x
Processing Type	Store & forward; wire speed switching
MAC Addresses	2048
Memory Bandwidth	3.2 Gbps
Frame Buffer Memory	512 Kbit
Flow Control	IEEE 802.3x flow control, back pressure flow control
Interface	
RJ-45 Ports	10/100 Base-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 V _{rms} 1 minute
EMS Protection	Yes
Power Input	
Input Voltage Range	+12 V _{dc} ~ +48 V _{dc}
Power Consumption	0.15 A @ 24 V _{dc}
Protection	Power reverse polarity protection
EMS Protection	Yes
Connector	5-Pin Removable Terminal Block
Mechanical	
Casing	Plastic (Flammability UL 94V-0)
Dimensions (W x L x H)	64 mm x 98 mm x 118 mm
Installation	DIN-Rail Mounting
Environment	
Operating Temperature	-40 °C ~ +75 °C
Storage Temperature	-40 °C ~ +85 °C
Ambient Relative Humidity	10% ~ 90% RH, non-condensing

Applications



Dimensions (Units: mm)



Ordering Information

NS-208R CR	Unmanaged EN50155 8-port Industrial 10/100 Mbps Ethernet Switch (RoHS)
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Accessories

MDR-60-48	48 V/1.25 A, 60 W Power Supply with DIN-Rail Mounting
DIN-KA52F-48	48 V/0.52 A, 25 W Power Supply with DIN-Rail Mounting
KA52F-48	48 V/0.52 A, 25 W Power Supply