

# NS-209F Series/NSM-209F Series

8-port 10/100 Mbps Ethernet with 1 fiber port Switch

NS-209FC/FCS



NS-209FT



NSM-209FC/FCS



NSM-209FT



## Highlight Information ▶▶▶



For NSM-209F series



For NS-209F series



## Features ▶▶▶

- Provides 1 x 100-FX fiber port plus 8 x Ethernet ports
- Each port supports both 10/100 Mbps speed auto negotiation
- Full duplex IEEE 802.3x and half duplex backpressure flow control
- Automatic MDI/MDI-X crossover for plug-and-play
- Store-and-forward architecture
- Supports operating temperatures from 0 ~ +70 °C

## Introduction

The NS-209F/NSM-209F is a 8-port unmanaged Ethernet with 1 fiber port switch. Using fiber optics, you can prevent noise from interfering with your system and supports high-speed (100 Mbps) and high-distance (up to 30 km) transmissions.

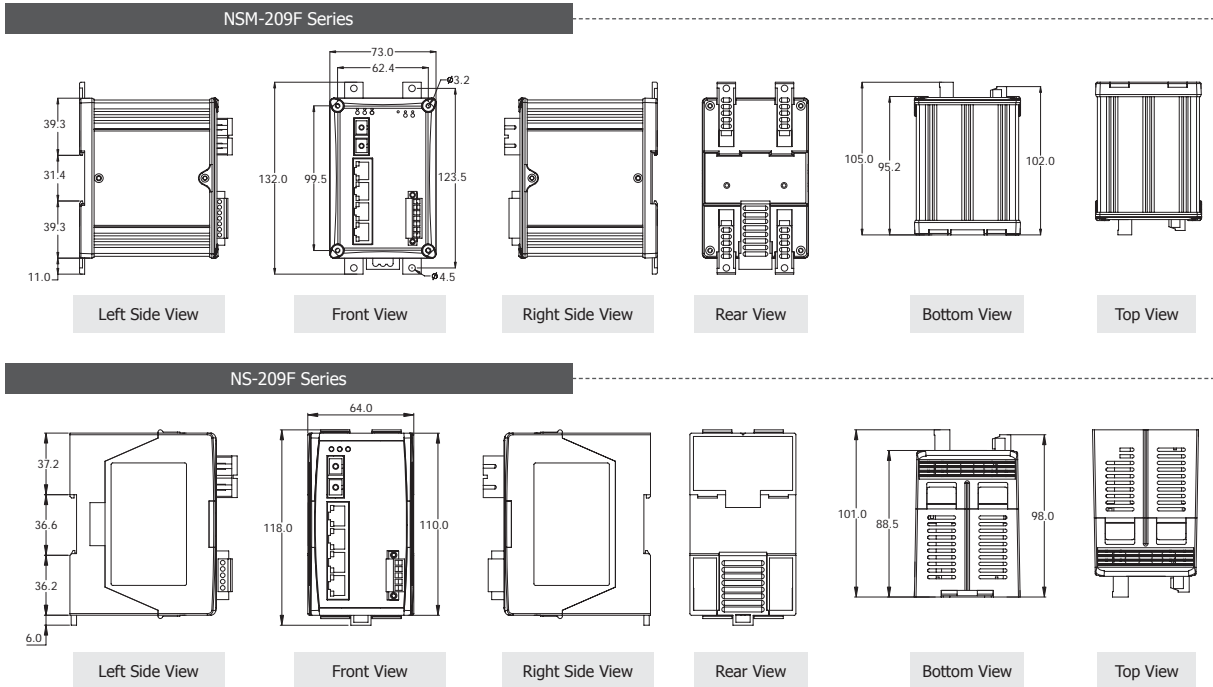
The NS-209F/NSM-209F provides a wide 12 to 48 V<sub>dc</sub> power range to fit all the common power standards found in industrial automation, without external power converters. The wide power input lowers installation and maintenance costs.

## Specifications

Models	NS-209F Series	NSM-209F Series
Technology		
Standards	IEEE 802.3, 802.3u, 802.3x	
Processing Type	Store & forward; wire speed switching	
MAC Addresses	2048	
Memory Bandwidth	2 Gbps	
Frame Buffer Memory	512 Kbit	
Flow Control	IEEE 802.3x flow control, back pressure flow control	
Ethernet 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 <sub>rms</sub> 1 minute	
Fiber Interface (100 Base-FX; SC/ST type)		
Multi-Mode	NS-209FT/NS-209FC NSM-209FT/NSM-209FC	Multi mode fiber cables: 50/125, 62.5/125 or 100/140 μm Distance: 2 km, (62.5/125 μm recommended) for full duplex Wavelength: 1300 or 1310nm Min. TX Output: -20 dBm Max. TX Output: -14 dBm Max. RX Sensitivity: -32 dBm
Single-Mode	NS-209FCS/NSM-209FCS	Single-mode fiber cables: 8.3/125, 8.7/125, 9/125 or 10/125 μm Distance: 30 km, (9/125 μm recommended) for full duplex Wavelength: 1300 or 1310nm Min. TX Output: -15 dBm Max. TX Output: -8 dBm Max. RX Sensitivity: -34 dBm

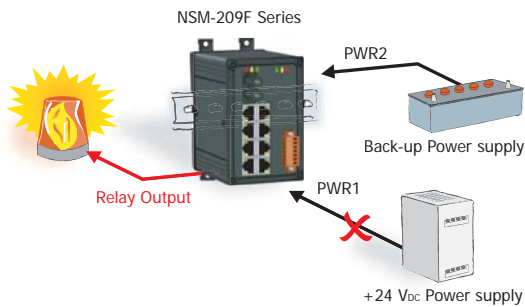
Models	NS-209F Series	NSM-209F Series
<b>Power Input</b>		
Input Voltage Range	+12 ~ +48 V <sub>DC</sub> (Redundant input)	+12 ~ +48 V <sub>DC</sub> (Redundant input) One relay output with current carrying capacity of 1 A @ 30 V <sub>DC</sub>
Power Consumption	0.26 A @ 24 V <sub>DC</sub>	
Protection	Power reverse polarity protection	
+/-4 kV ESD Protection	Yes	
Connector	5-Pin Removable Terminal Block	7-Pin Removable Terminal Block
<b>Mechanical</b>		
Casing	Plastic (Flammability UL 94V-0)	Metal (IP20 Protection)
Dimensions (W x L x H)	64 mm x 101 mm x 118 mm	73 mm x 105 mm x 132 mm
Installation	DIN-Rail Mounting	DIN-Rail Mounting or Wall Mounting
<b>Environmental</b>		
Operating Temperature	0 °C ~ +70 °C	
Storage Temperature	-20 °C ~ +85 °C	
Ambient Relative Humidity	10% ~ 90% RH, non-condensing	

**Dimensions (Units: mm)**



**Redundant Power Input for NSM-209F series**

Both power inputs can be connected simultaneously to live DC power sources. If one power source fails, the other live source acts as a backup, and automatically supplies all of NSM-209F series power needs.



**Ordering Information**

NS-209FT CR	Multi-mode, ST Connector, 8-port 10/100 Mbps with 1 fiber port Switch (RoHS)
NS-209FC CR	Multi-mode, SC Connector, 8-port 10/100 Mbps with 1 fiber port Switch (RoHS)
NS-209FCS CR	Single-mode 30 km, SC Connector, 8-port 10/100 Mbps with 1 fiber port Switch (RoHS)
NSM-209FT CR	Multi-mode, ST Connector, 8-port 10/100 Mbps with 1 fiber port Switch; metal case (RoHS)
NSM-209FC CR	Multi-mode, SC Connector, 8-port 10/100 Mbps with 1 fiber port Switch; metal case (RoHS)
NSM-209FCS CR	Single-mode 30 km, SC Connector, 8-port 10/100 Mbps with 1 fiber port Switch; metal case (RoHS)

**Accessories**

MDR-60-24	24 V/2.5 A, 60 W Power Supply with DIN-Rail Mounting
MDR-20-24	24 V/1 A, 24 W Power Supply with DIN-Rail Mounting
DIN-KA52F	24 V/1.04 A, 25 W Power Supply