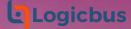


# NS-209F Series/NSM-209F Series



Unmanaged 8-port Industrial 10/100 Base-TX with 100 Base-FX Fiber Switch



















#### Features >>>>

- Each port supports both 10/100 Mbps speed auto negotiation
- Automatic MDI/MDI-X crossover for plug-and-play
- Full duplex IEEE 802.3x and half duplex backpressure flow control
- DIN-Rail Mounting or Wall Mounting for NSM-209F series
- MAC address 2048
- Store-and-forward architecture
- Supports +12 V<sub>DC</sub> ~ +48 V<sub>DC</sub> power input
- DIN-Rail Mounting for NS-209F series

#### Introduction

The NS-209F/NSM-209F series is a Unmanaged 8-port Industrial 10/100 Base-TX with 100 Base-FX Switch that secures data transmission by using fiber optic transmission to provide immunity from EMI/RFI interference. It uses Ethernet for transmitting a signal up to 30 km, and is the perfect solution for applications where transmission must be protected from electrical exposure, surges, lightning or chemical corrosion.

The NS-209F/NSM-209F series operates at full duplex mode. In full duplex mode, range is 30 km with 8.3/125, 8.7/125, 9/125 or 10/125  $\mu m$  fiber cables.

NSM-209F provides two power inputs that can be connected simultaneously to live DC power sources. If one of the power inputs fails, the other live source will act as a backup to automatically support the NSM-209F's power needs.

#### 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		
Fiber Optics Port	100 Base-FX		
Ethernet Isolation	1500 V <sub>rms</sub> 1 minute		
EMS Protection	Yes		



























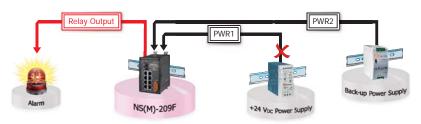


Models		NS-209F Series	NSM-209F Series	
Fiber Interface	(100 Base-FX; SC/	ST type)		
		Multi mode fiber cables: 50/125, 62.5/125	or 100/140 μm	
		Distance: 2 km, (62.5/125 µm recommended) for full duplex		
Barriet Barrie	NS-209FT/FC	Wavelength: 1300 or 1310 nm		
Multi-Mode	NSM-209FT/FC	Min. TX Output: -20 dBm		
		Max. TX Output: -14 dBm		
		Max. RX Sensitivity: -32 dBm		
Fiber Interface	(100 Base-FX; SC/	ST type)		
		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		
Single-Mode	NS-209FCS	Wavelength: 1300 or 1310 nm		
Sirigic-Wode	NSM-209FCS	Min. TX Output: -15 dBm		
		Max. TX Output: -8 dBm		
		Min. RX Sensitivity: -34 dBm		
Power Input				
Input Voltage F	Range	+12 Vpc ~ +48 Vpc (Non-isolated)	+12 VDC ~ +48 VDC (Non-isolated)	
		,	Redundant Inputs with one relay output (1 A @ 24 Vpc) for alarm	
Power Consumption		0.26 A @ 24 Vbc		
LED Indicator		Yes		
Protection		Power reverse polarity protection		
+/-4 kV ESD Protection		Yes		
Mechanical				
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	
Environmental	Environmental			
Operating Temperature		-10 °C ~ +75 °C		
Storage Temperature		-20 °C ~ +85 °C		
Ambient Relative Humidity		10% ~ 90% RH, non-condensing		

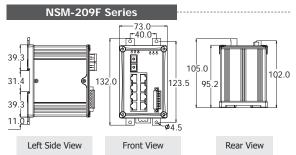
## - Redundant Power Input

Both power inputs can be connected simultaneously to live DC power sources.

If one power source fails, the other live source will act as a backup, and automatically supplies all of NSM-209F series power needs.



#### Dimensions (Units: mm)



# - Ordering Information

T	9
NS-209FT CR	Multi-mode, ST Connector, 8-port 10/100 Mbps with 1
N3-2091 1 CK	Fiber port Switch (RoHS)
NS-209FC CR	Multi-mode, SC Connector, 8-port 10/100 Mbps with 1
N3-209FC CR	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	Multi-mode, ST Connector, 8-port 10/100 Mbps with 1
	Fiber port Switch; metal case
NSM-209FC	Multi-mode, SC Connector, 8-port 10/100 Mbps with 1
	Fiber port Switch; metal case
NCM 200FCC	Single-mode 30 km, SC Connector, 8-port 10/100 Mbps
NSM-209FCS	with 1 Fiber port Switch; metal case

#### NS-209F Series 101.0 98.0 118.0 88.5 36.6 110.0 36 Left Side View Front View Rear View

## **Accessories**

LP1025D-12S	12V/2.1A, 25W Power Supply with DIN-Rail Mounting
LP1025D-24S	24V/1.04A, 24W Power Supply with DIN-Rail Mounting
LP1050D-24SDA	24V/2.1A, 50 W Power Supply with DIN-Rail Mounting























