

# NS-205F Series/NSM-205F Series

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

NS-205FC/FCS



NS-205FT



NSM-205FC/FCS



NSM-205FT



## Highlight Information ▶▶▶



For NSM-205F series



For NS-205F series



## Features ▶▶▶

- Provides 1 x 100-FX fiber port plus 4 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-205F/NSM-205F is a 4-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 15 km) transmissions.

The NS-205F/NSM-205F provides a wide 10 to 30 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.

## Comparison Table of 5-port 100 Base-FX Fiber Switch

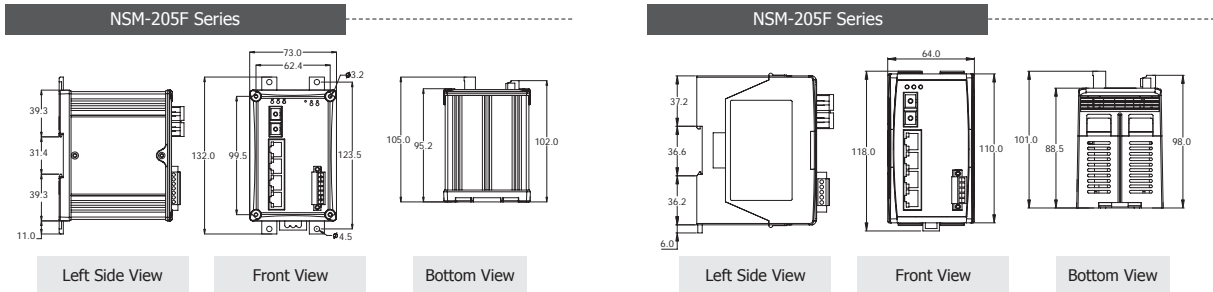
Mode Name	NS-205F	NSM-205F	NS-205AF	NSM-205AF
PoE	-			
Input Voltage Range	+10 ~ 30 V <sub>DC</sub>		+12 ~ 48 V <sub>DC</sub>	
Operating Temperature	0 °C ~ +70 °C		-30 °C ~ +75 °C	
Casing	Plastic	Metal (IP20)	Plastic	Metal (IP30)
Installation	DIN-Rail Mounting	DIN-Rail Mounting or Wall Mounting	DIN-Rail Mounting	
Dimensions (W x H x D) (Unit: mm)	64 x 118 x 101	73 x 121 x 105	31 x 157 x 113	25 x 168 x 119

## Specifications

Models	NS-205F Series	NSM-205F Series
Technology		
Standards	IEEE 802.3, 802.3u, 802.3x	
Processing Type	Store & forward; wire speed switching	
MAC Addresses	1024	
Memory Bandwidth	3.2 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	

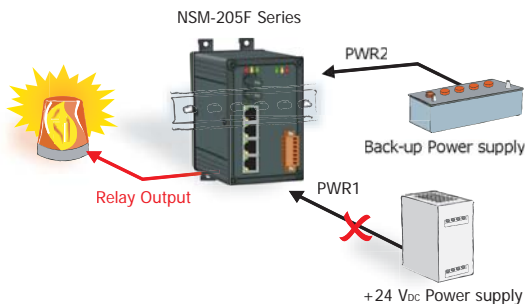
Models		NS-205F Series	NSM-205F Series
Fiber Interface (100 Base-FX; SC/ST type)			
Multi-Mode	NS-205FT/NS-205FC NSM-205FT/NSM-205FC	Multi mode fiber cables: 50/125, 62.5/125 or 100/140 $\mu$ m Distance: 2 km, (62.5/125 $\mu$ m recommended) for full duplex Wavelength: 1300 or 1310nm Min. TX Output: -20 dBm Max. TX Output: -14 dBm Max. RX Sensitivity: -34 dBm	
Single-Mode	NS-205FCS/NSM-205FCS	Single-mode fiber cables: 8.3/125, 8.7/125, 9/125 or 10/125 $\mu$ m Distance: 15 km, (9/125 $\mu$ m recommended) for full duplex Wavelength: 1300 or 1310nm Min. TX Output: -15 dBm Max. TX Output: -8 dBm Max. RX Sensitivity: -36 dBm	
Power Input			
Input Voltage Range	+10 ~ +30 V <sub>DC</sub> (Redundant input)	+10 ~ +30 V <sub>DC</sub> (Redundant input) One relay output with current carrying capacity of 2 A @ 30 V <sub>DC</sub>	
Power Consumption	0.14 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	
Mechanical			
Casing	Plastic (Flammability UL 94V-0)	Metal (IP20 Protection)	
Dimensions (W x L x H)	64 mm x 98 mm x 110 mm	73 mm x 110 mm x 102 mm	
Installation	DIN-Rail Mounting		DIN-Rail Mounting or Wall Mounting
Environmental			
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-205F 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-205F series power needs.



**Ordering Information**

NS-205FT CR	Multi-mode, ST Connector, 4-port 10/100 Mbps with 1 fiber port Switch (RoHS)
NS-205FC CR	Multi-mode, SC Connector, 4-port 10/100 Mbps with 1 fiber port Switch (RoHS)
NS-205FCS CR	Single-mode 30 km, SC Connector, 4-port 10/100 Mbps with 1 fiber port Switch (RoHS)
NSM-205FT CR	Multi-mode, ST Connector, 4-port 10/100 Mbps with 1 fiber port Switch; metal case (RoHS)
NSM-205FC CR	Multi-mode, SC Connector, 4-port 10/100 Mbps with 1 fiber port Switch; metal case (RoHS)
NSM-205FCS CR	Single-mode 30 km, SC Connector, 4-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