







Unmanaged 4-Port Industrial 10/100 Base-T(X) with 100 Base-FX Fiber Switch

Highlight Information ►►►►

NS-205F/NSM-205F Series















Only for NSM-205F Series





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NSM-205F Series



NS-205F Series



Introduction

The NS-205F/NSM-205F series is a Unmanaged 4-Port Industrial Ethernet(10/100Base-TX) to Fiber Optics(100Base-FX) switch that secures data transmission by using fiber optic transmission to provide immunity from EMI/RFI interference. It is used Ethernet for transmitting a signal up to 40 Km, and is the perfect solution for applications where transmission must be protected from electrical exposure, surges, lightning or chemical corrosion.

The Ethernet supports 10/ 100M auto-negotiation feature and auto MDI /MDIX function.

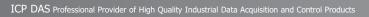
Features

- 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
- 3.2Gbps high performance memory bandwidth
- Frame buffer memory: 512 Kbit
- Integrated look-up engine with dedicated 1 K unicast MAC addresses
- Supports +10~+30Vdc voltage
- Supports operating temperatures from 0 ~ +70°C
- DIN rail mount for industrial usage













High Reliability Industrial Ethernet Switch for Rugged Environment

Specifications

Technology				
Standards	IEEE802.3, 802.3u, 802.3x			
Processing Type	Store & forward wire speed switching - no delays			
MAC Addresses	1024			
Memory Bandwidth	3.2 Gbps			
Flow Control	IEEE802.3x flow control, back pressure flow control			
Interface				
RJ45 Ports	10/100BaseT(X) auto negotiation speed, F/H duplex mode, and auto MDI/MDIX connection			
Fiber Optic Port	100 Base-FX(Multi-mode; SC connector)			
LED Indicators	10/100M, Link/Act, Full duplex/Half	duplex(Fiber Port)		
Ethernet Isolation	1500 Vrms 1 minute	1500 Vrms 1 minute		
Frame Ground for EMS Protection	Yes			
	Multi mode fiber cables: 50/125, 62.	5/125 or 100/140 μm		
	Distance: 2 km, (62.5/125 µ mrecommended) for full duplex			
M. III M. J. E'I. O. II	Wavelength: 1300 or 1310nm			
Multi Mode Fiber Optic	Min. TX Output: -20 dBm			
	Max. TX Output: -14 dBm			
	RX Sensitivity: -34 to -31 dBm			
	Single-mode fiber cables: 8.3/125, 8.7/125, 9/125 or 10/125 μm			
	Distance: 15 km, (9/125 µm mrecommended) for full duplex			
Single Mode Fiber Optic	Wavelength: 1300 or 1310nm			
	Min. TX Output: - 15 dBm			
	Max. TX Output: -8 dBm			
	RX Sensitivity: -36 to -31 dBm			
Ethernet Transmission	Ethernet: 2-pair UTP/STP Cat.3,4,5, EIA/TIA-568 100-ohm			
distance	Fast Ethernet: 2-pair UTP/STP Cat. 5, EIA/TIA-568 100-ohm			
Power				
Input Voltage Range	+10 ~ +30VDC (Non-isolation)			
Power Consumption	0.14A@24VDC, +/- 5% arrowed with	h 100M Full duplex		
LED Indicator	Yes			
Protection	Power reverse polarity protection			
Frame Ground for EMS Protection	Yes			
Mechanical				
Models	NS-205F Series	NSM-205F Series		
Case	Plastic	Metal		
Flammability	UL 94V-0	IP20		
Dimensions (W x H x D)	64mm x 110mm x 98mm	72.5mm x 110mm x 102mm		
Installation	DIN-Rail mount	DIN-Rail mount; Wall mounting		
Environmental				
Operating Temperature	0°C ~ +70°C			
Storage Temperature	-20°C ~ +85°C			
Ambient Relative Humidity	mbient Relative Humidity 10% to 90% non-condensing			



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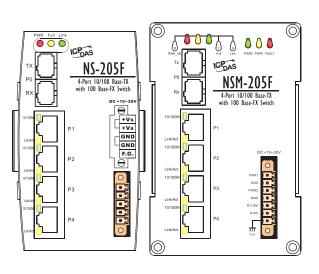


Unmanaged Ethernet Switches with Fiber Optics

LED Functions

NSM-205F Series LED Indicator Functions

LED	Color	Description	
DWD OK	Red On	Core Power is OK	
PWR_OK	Red Off	Core Power is Off	
Full for P0		Full Duplex	
	Yellow Off	Half Duplex	
Link for P0	Green On	Link/Act	
LITIK TOT FO	Green Off	Not Networking	
	Yellow On		
Ethernet Port	Yellow Off	Not Networking	
(P1 ~ P4)		Link to 100 Mbps	
	Green Off		
PWR2 PWR1 FAULT	Green On	Power is being supplied to power input PWR2	
	Green Off	Power is not being supplied to power input PWR2	
	Yellow On	Power is being supplied to power input PWR1	
	Yellow Off	Power is not being supplied to power input PWR1	
	Red On	Power is not being supplied to power input PWR1 and PWR2	
	Red Off	Power is being supplied to power input PWR1 and PWR2	



NS-205F Series LED Indicator Functions

NS-205F Series LED Indicator Functions			
LED	Color	Description	
Power	Red On	Power is On	
	Red Off	Power is Off	
Fiber Port (P0)	Yellow On	Full Duplex Mode	
	Yellow Off	Half Duplex Mode	
	Green On	Link/Act	
Ethernet Port (P1 ~ P4)	Green Off	Not Networking	
	Yellow On	Link/Act	
	Yellow Off	Not Networking	
	Green On	Link to 100 Mbps	
	Green Off	Link to 10 Mbps	

• Redundant Power Inputs

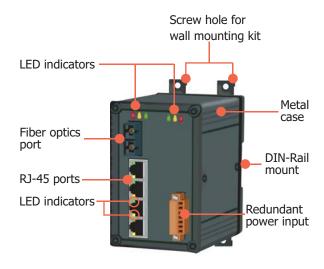
Both power inputs can be connected simultaneously to live DC power sources.

If one power source fails, the other live sourceacts as a backup, and automatically supplies all of NSM-205F Series power needs.



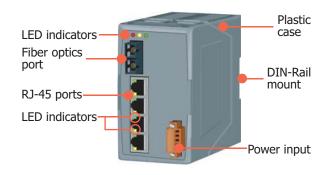
Appearance

NSM-205F Series



NS-205F Series

ICP DAS Professional Provider of High Quality Industrial Data Acquisition and Control Products









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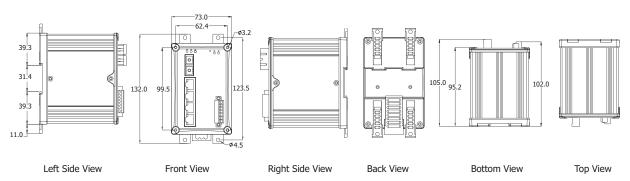




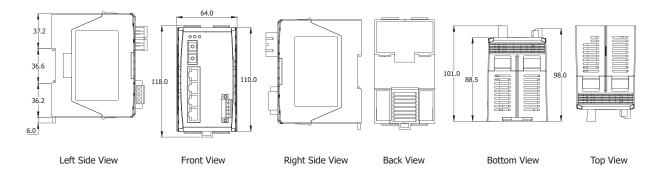


• Dimensions (Unit: mm)

NSM-205F Series



NS-205F Series



Ordering Information

NS M -205F				
	Fiber Port Connector	Single Mode Distance	Operating Temperature	
Ordering Code Definition	T: Multi mode ST connector C: Multi mode SC connector CS: Single mode SC connector	40 : 40 km Standard Models: 15 km	T : Operating Temp: -30 to +75°C Standard Models: 0 to 70°C	
Models	NS-205FT, NSM-205FT NS-205FC, NSM-205FC NS-205FCS, NSM-205FCS	NS-205FCS-40 NSM-205FCS-40	NS-205FT-T, NSM-205FT-T NS-205FC-T, NSM-205FC-T NS-205FCS-T, NSM-205FCS-T NS-205FCS-40T, NSM-205FCS-40T	

Accessories

GPSU06-6	24V/0.25A Power Supply, (No-mounting)
KWM020-1824F	24V/0.75A Power Supply, (No-mounting)
DIN-KA52F	24V/1A Power Supply, (With DIN-Rail mounting)



