

NS-205PF Series/NSM-205PF Series

4-port 10/100 Mbps PoE (PSE) with 1 Fiber Port Switch

NS-205PF-24V Series/NSM-205PF-24V Series

4-port 10/100 Mbps PoE (PSE) with 1 Fiber Port and +24 V_{dc} Input Switch *Available soon*

NS-205PFC/FCS/FCS-60
NS-205PFC-24V/FCS-24V/FCS-60-24V

NS-205PFT
NS-205PFT-24V

NSM-205PFC/FCS/FCS-60
NSM-205PFC-24V/FCS-24V/FCS-60-24V

NSM-205PFT
NSM-205PFT-24V



Features ▶▶▶

- Provides 1 x 100-FX fiber port plus 4 x Ethernet ports
- Each port supports both 10/100 Mbps speed auto negotiation
- Supports operating temperatures from -30 °C ~ +75 °C
- Full duplex IEEE 802.3x and half duplex backpressure flow control
- 4 PoE ports with Power Sourcing Equipment (PSE) operation
- Over-temperature, over-current and over/under-voltage detection
- Automatic MDI/MDI-X crossover for plug-and-play
- Store-and-forward architecture
- Auto-detection of PD (powered devices) and automatic power management
- DIN-Rail Mounting

Introduction

The NS-205PF/NSM-205PF is a 4-port unmanaged PoE (PSE) with 1 fiber port switch; it supports 4 PoE ports which are classified as power source equipment (PSE). The NS-205PF/NSM-205PF makes centralized power supply come true and provides up to 15.4 watts of power per PSE port. Using fiber optics, you can prevent noise from interfering with your system and supports high-speed (100 Mbps) and high-distance (up to 60 km) transmissions.

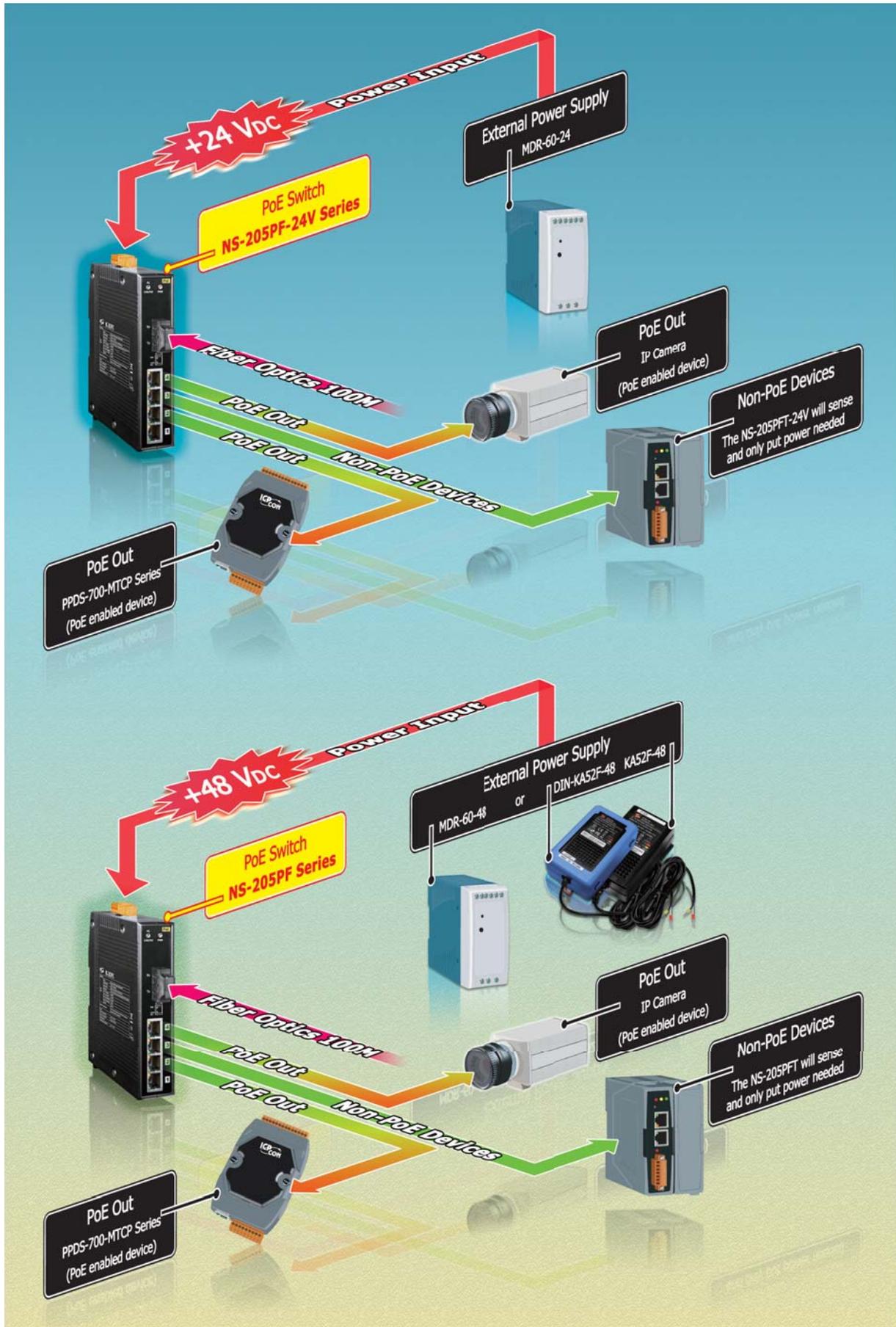
The NS-205PF-24V/NSM-205PF-24V series is designed with +24 V_{dc} to +48 V_{dc} boost for PoE application where +48 V_{dc} power supply is not available.

Comparison Table of 4-port 10/100 Mbps PoE (PSE) with 1 Fiber Port Switch

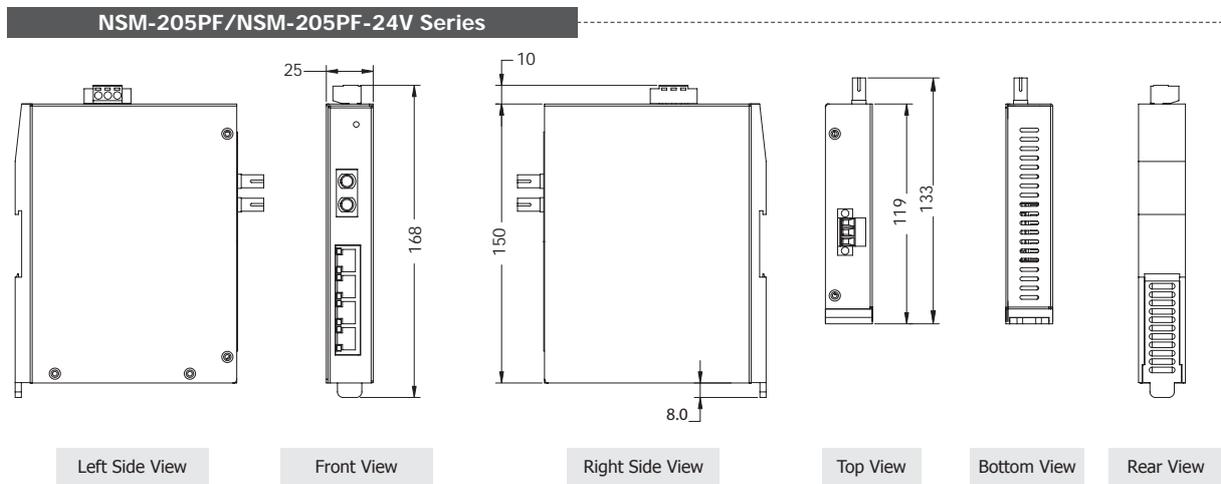
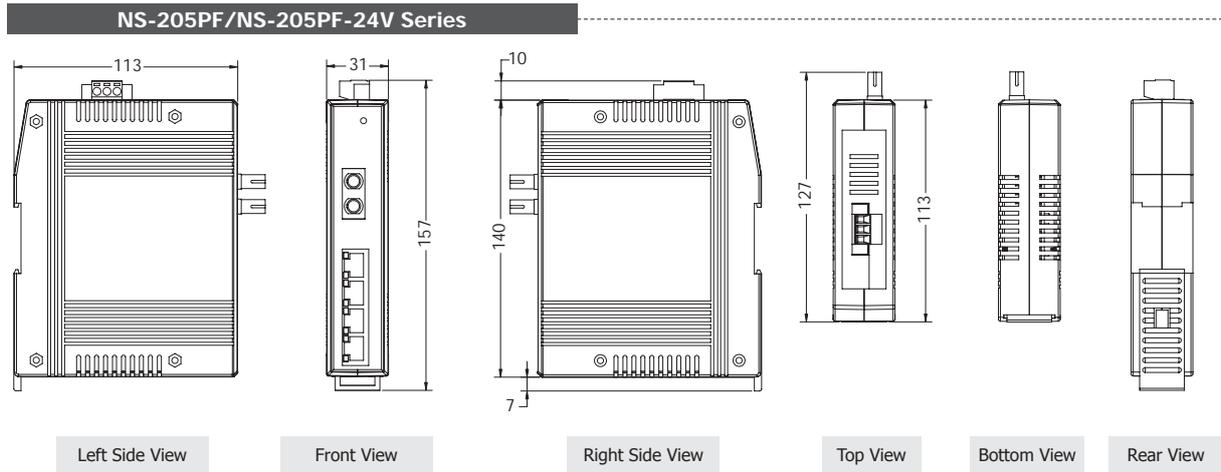
Mode Name	NS-205PF-24V	NSM-205PF-24V	NS-205PF	NSM-205PF
PoE	802.3af			
Input Voltage Range	+18 V _{dc} ~ +32 V _{dc}		+46 V _{dc} ~ +55 V _{dc}	
Operating Temperature	-30 °C ~ +75 °C			
Casing	Plastic	Metal (IP30)	Plastic	Metal (IP30)
Installation	DIN-Rail Mounting			
Dimensions (W x L x H)	31 mm x 127 mm x 157 mm	25 mm x 133 mm x 168 mm	31 mm x 127 mm x 157 mm	25 mm x 133 mm x 168 mm


Specifications

Models		NS-205PF Series	NSM-205PF Series	NS-205PF-24V Series	NSM-205PF-24V Series
Technology					
Standards	IEEE 802.3, 802.3u, 802.3x, 802.3af (Power over Ethernet)				
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, Power Device is detected				
Ethernet Isolation	1500 V _{rms} 1 minute				
+/-4 kV ESD Protection	Yes				
Fiber Interface (100 Base-FX; SC/ST type)					
Multi-Mode	NS-205PFT NS-205PFC NSM-205PFT NSM-205PFC	Multi mode fiber cables: 50/125, 62.5/125 or 100/140 μ m Distance: 2 km, (62.5/125 μ m recommended) for full duplex Wavelength: 1300 or 1310 nm Min. TX Output: -20 dBm Max. TX Output: -14 dBm Max. RX Sensitivity: -32 dBm Min. RX Overload: -8 dBm Budget: 12 dBm			
	NS-205PFT-24V NS-205PFC-24V NSM-205PFT-24V NSM-205PFC-24V				
Single-Mode	NS-205PFCS NSM-205PFCS	Single-mode fiber cables: 8.3/125, 8.7/125, 9/125 or 10/125 μ m Distance: 30 km, (9/125 μ m recommended) for full duplex Wavelength: 1300 or 1310 nm Min. TX Output: -15 dBm Max. TX Output: -8 dBm Max. RX Sensitivity: -34 dBm Min. RX Overload: -5 dBm Budget: 19 dBm			
	NS-205PFCS-24V NSM-205PFCS-24V				
Single-Mode	NS-205PFCS-60 NSM-205PFCS-60 NS-205PFCS-60-24V NSM-205PFCS-60-24V	Single-mode fiber cables: 8.3/125, 8.7/125, 9/125 or 10/125 μ m Distance: 60 km, (9/125 μ m recommended) for full duplex Wavelength: 1300 or 1310 nm Min. TX Output: -5 dBm Max. TX Output: 0 dBm Max. RX Sensitivity: -35 dBm Min. RX Overload: -5 dBm Budget: 30 dBm			
Power Input					
Input Voltage Range	+46 V _{dc} ~ +55 V _{dc} for PoE output		+18 V _{dc} ~ +32 V _{dc}		
Power Consumption	0.08 A @ 48 V _{dc} without PD loading; 1.5 A @ 48 V _{dc} with PD full loading		0.24 A @ 24 V _{dc} without PD loading; 3.2 A @ 24 V _{dc} with PD full loading; 4.6 A @ 18 V _{dc} with PD full loading		
Protection	Power reverse polarity protection				
+/-4 kV ESD Protection	Yes				
Connector	3-Pin Removable Terminal Block				
PoE Technology					
PoE Compliance	100% IEEE 802.3af compliant				
PoE Classification	PSE (Power Sourcing Equipment)				
PoE Voltage	+48 V _{dc} depending on power input				
PoE Voltage	Up to 15.4 watts per channel				
PoE Operation	Automatic detection and power management				
PoE Pin assignments	V+ (Pin 1,2), V- (Pin 3,6)				
PoE disconnect mode	DC disconnect				
Mechanical					
Casing	Plastic (Flammability UL 94V-0)	Metal (IP30 Protection)	Plastic (Flammability UL 94V-0)	Metal (IP30 Protection)	
Dimensions (W x L x H) (Unit: mm)	31 x 127 x 157	25 x 133 x 168	31 x 127 x 157	25 x 133 x 168	
Installation	DIN-Rail Mounting				
Environmental					
Operating Temperature	-30 °C ~ +75 °C				
Storage Temperature	-40 °C ~ +85 °C				
Ambient Relative Humidity	10% ~ 90% RH, non-condensing				



Dimensions (Units: mm)



Ordering Information

NS-205PFT CR	Multi-mode, ST Connector, 4-port 10/100 Mbps PoE (PSE) with 1 Fiber port Switch (RoHS)
NS-205PFC CR	Multi-mode, SC Connector, 4-port 10/100 Mbps PoE (PSE) with 1 Fiber port Switch (RoHS)
NS-205PFC CR	Single-mode 30 km, SC Connector, 4-port 10/100 Mbps PoE (PSE) with 1 Fiber port Switch (RoHS)
NS-205PFC-60 CR	Single-mode 60 km, SC Connector, 4-port 10/100 Mbps PoE (PSE) with 1 Fiber port Switch (RoHS)
NSM-205PFT CR	Multi-mode, ST Connector, 4-port 10/100 Mbps PoE (PSE) with 1 Fiber port Switch; metal case (RoHS)
NSM-205PFC CR	Multi-mode, SC Connector, 4-port 10/100 Mbps PoE (PSE) with 1 Fiber port Switch; metal case (RoHS)
NSM-205PFC CR	Single-mode 30 km, SC Connector, 4-port 10/100 Mbps PoE (PSE) with 1 Fiber port Switch; metal case (RoHS)
NSM-205PFC-60 CR	Single-mode 60 km, SC Connector, 4-port 10/100 Mbps PoE (PSE) with 1 Fiber port Switch; metal case (RoHS)
NS-205PFT-24V CR	Multi-mode, ST Connector, 4-port 10/100 Mbps PoE (PSE) with 1 Fiber port and +24 V _{dc} Input Switch (RoHS)
NS-205PFC-24V CR	Multi-mode, SC Connector, 4-port 10/100 Mbps PoE (PSE) with 1 Fiber port and +24 V _{dc} Input Switch (RoHS)
NS-205PFC-24V CR	Single-mode 30 km, SC Connector, 4-port 10/100 Mbps PoE (PSE) with 1 Fiber port and +24 V _{dc} Input Switch (RoHS)
NS-205PFC-60-24V CR	Single-mode 60 km, SC Connector, 4-port 10/100 Mbps PoE (PSE) with 1 Fiber port and +24 V _{dc} Input Switch (RoHS)
NSM-205PFT-24V CR	Multi-mode, ST Connector, 4-port 10/100 Mbps PoE (PSE) with 1 Fiber port and +24 V _{dc} Input Switch; metal case (RoHS)
NSM-205PFC-24V CR	Multi-mode, SC Connector, 4-port 10/100 Mbps PoE (PSE) with 1 Fiber port and +24 V _{dc} Input Switch; metal case (RoHS)
NSM-205PFC-24V CR	Single-mode 30 km, SC Connector, 4-port 10/100 Mbps PoE (PSE) with 1 Fiber port and +24 V _{dc} Input Switch; metal case (RoHS)
NSM-205PFC-60-24V CR	Single-mode 60 km, SC Connector, 4-port 10/100 Mbps PoE (PSE) with 1 Fiber port and +24 V _{dc} Input Switch; metal case (RoHS)

Accessories

DR-120-24	24V/5 A, 120 W Single Output Industrial DIN Rail Power Supply
MDR-60-24	24V/2.5A, 60 W Power Supply with DIN-Rail Mounting
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