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NS-205PF Series/NSM-205PF Series
NS-205PF-24V Series/NSM-205PF-24V Series
4-port 10/100 Mbps PoE (PSE) with 1 Fiber Port Switch

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
- 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
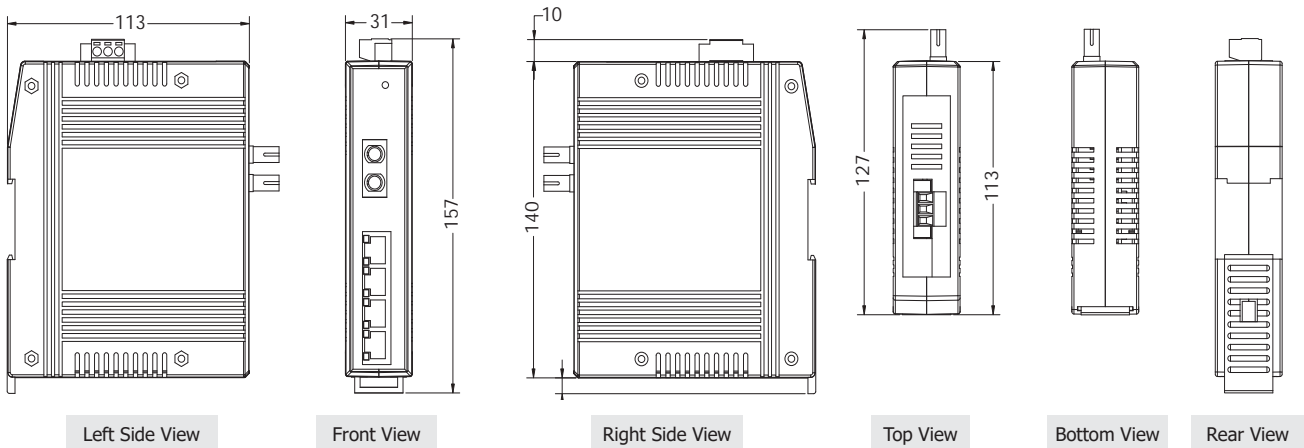- Auto-detection of PD (powered devices) and automatic power management

CE UKCA FC RoHS

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 VDC to +48 VDC boost for PoE application where +48 VDC power supply is not available.

Dimensions (Units: mm)

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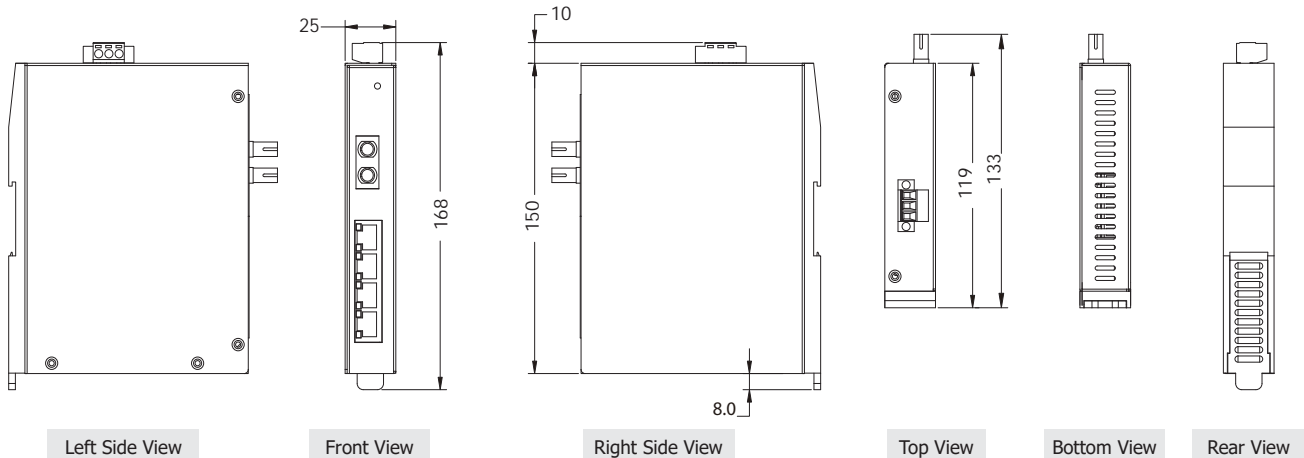

| Left Side View | Front View | Right Side View | Top View | Bottom View | Rear View |

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

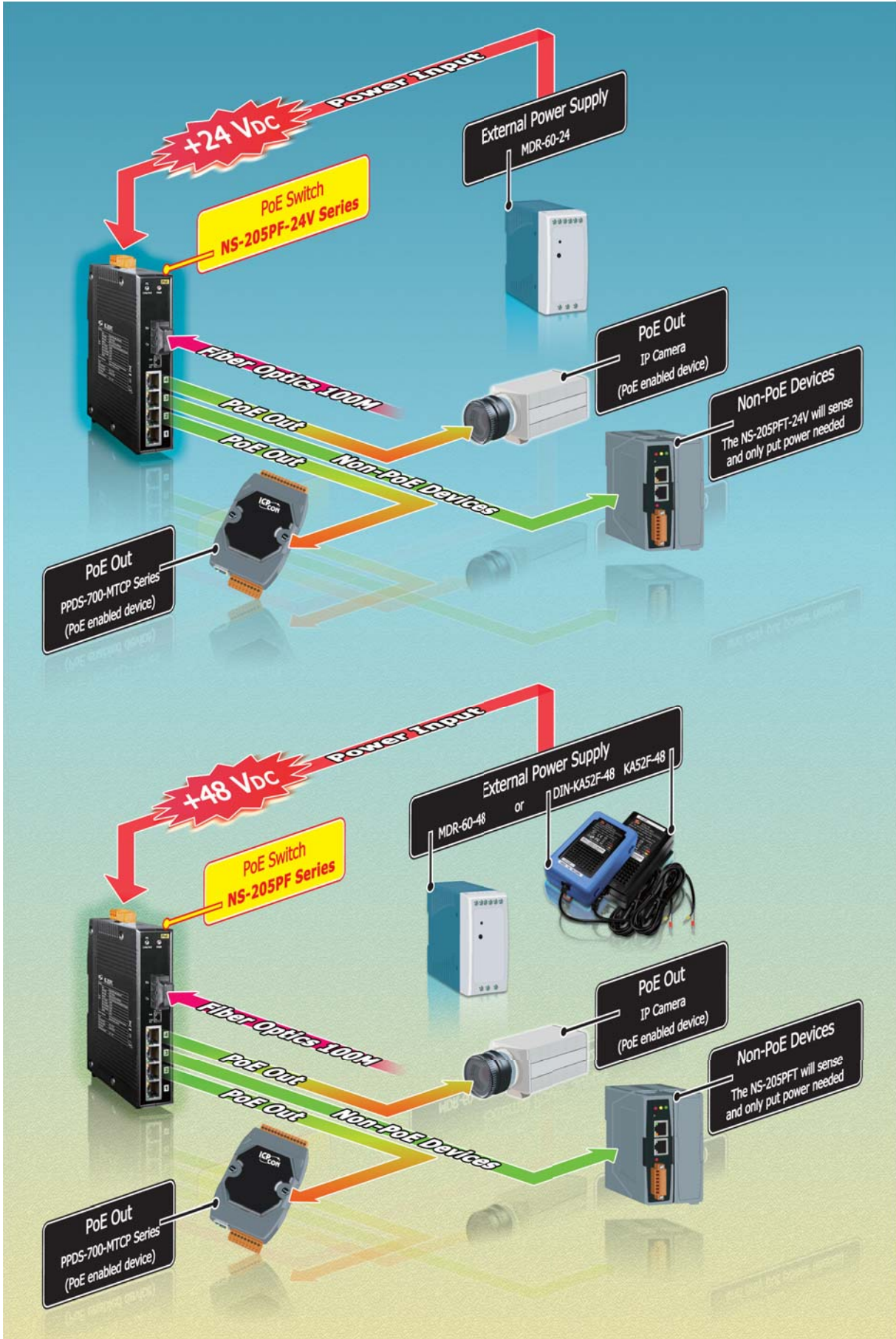| Left Side View | Front View | Right Side View | Top View | Bottom View | Rear View |

■ Specifications

Model	NS-205PF Series	NSM-205PF Series	NS-205PF-24V Series	NSM-205PF-24V Series
EMS Protection				
ESD (IEC 61000-4-2)	± 4 kV Contact			
LED Indicators				
Status	Power, Link/Act, Power Device is detected			
Ethernet				
Ports	4 x RJ-45, 10/100Base-TX			
Standards	IEEE 802.3, 802.3u, 802.3x ,802.3af (Power over Ethernet)			
Processing Type	Store & forward; wire speed switching			
MAC Table	1024			
Memory Bandwidth	3.2 Gbps			
Frame Buffer Memory	512 Kbit			
Flow Control	IEEE 802.3x flow control, back pressure flow control			
Isolation	1500 Vrms 1 minute			
PoE Technology				
PoE Compliance	100% IEEE 802.3af compliant			
PoE Power	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			
PoE Voltage	+48 VDC depending on power input			

Fiber (1 x 100 Base-FX; SC/ST type)

Multi-Mode	NS-205PFT NS-205PFC NSM-205PFT NSM-205PFC NS-205PFT-24V NS-205PFC-24V NSM-205PFT-24V NSM-205PFC-24V	Fiber Cable: 50/125, 62.5/125 or 100/140 µm Distance:2 km, (62.5/125 µm recommended) for full duplex Wavelength:1300 or 1310nm TX Output: -20 dBm Min., -14 dBm Max. RX Sensitivity: -32 dBm RX Overload: -8 dBm Budget: 12 dBm
Single-Mode	NS-205PFCS NSM-205PFCS NS-205PFCS-24V NSM-205PFCS-24V	Fiber Cable: 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 TX Output: -15 dBm Min., -8 dBm Max. RX Sensitivity: -34 dBm RX Overload: -5 dBm Budget: 19 dBm
Single-Mode	NS-205PFCS-60 NSM-205PFCS-60 NS-205PFCS-60-24V NSM-205PFCS-60-24V	Fiber Cable: 8.3/125, 8.7/125, 9/125 or 10/125 µm Distance: : 60 km, (9/125 µm recommended) for full duplex Wavelength:1300 or 1310nm TX Output: -5 dBm Min., -0 dBm Max. RX Sensitivity: -35 dBm RX Overload: -5 dBm Budget: 30 dBm

Power

Model	NS-205PF Series	NSM-205PF Series	NS-205PF-24V Series	NSM-205PF-24V Series
Reverse Polarity Protection	Yes			
Input Range	+46 ~ +55 VDC for PoE output		+18 VDC ~ +32 VDC	
Consumption	0.08 A @ 48 VDC without PD loading; 1.5 A @ 48 VDC with PD full loading		0.24 A @ 24 VDC without PD loading; 3.2 A @ 24 VDC with PD full loading; 4.6 A @ 18 VDC with PD full loading	

Mechanical

Model	NS-205PF Series	NSM-205PF Series	NS-205PF-24V Series	NSM-205PF-24V Series
Casing	Plastic	Metal	Plastic	Metal
Dimensions (mm)	31 x 157 x 113 (W x L x H)	25 x 168 x 133 (W x L x H)	31 x 157 x 113 (W x L x H)	25 x 168 x 133 (W x L x H)
Installation	DIN-Rail Mounting			
Ingress Protection Rating	-	IP30	-	IP30

Environment

Operating Temperature	-30 °C ~ +75 °C
Storage Temperature	-40 °C ~ +85 °C
Humidity	10% ~ 90% RH, non-condensing

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◼ 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 VDC ~ +32 VDC		+46 VDC ~ +55 VDC	
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 157 mm x 113 mm	25 mm x 168 mm x 133 mm	31 mm x 157 mm x 113 mm	25 mm x 168 mm x 133 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-205PFCS CR	Single-mode 30 km, SC Connector, 4-port 10/100 Mbps PoE (PSE) with 1 Fiber port Switch (RoHS)
NS-205PFCS-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-205PFCS CR	Single-mode 30 km, SC Connector, 4-port 10/100 Mbps PoE (PSE) with 1 Fiber port Switch; metal case (RoHS)
NSM-205PFCS-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 VDC Input Switch (RoHS)
NS-205PFC-24V CR	Multi-mode, SC Connector, 4-port 10/100 Mbps PoE (PSE) with 1 Fiber port and 24 VDC Input Switch (RoHS)
NS-205PFCS-24V CR	Single-mode 30 km, SC Connector, 4-port 10/100 Mbps PoE (PSE) with 1 Fiber port and 24 VDC Input Switch (RoHS)
NS-205PFCS-60-24V CR	Single-mode 60 km, SC Connector, 4-port 10/100 Mbps PoE (PSE) with 1 Fiber port and 24 VDC Input Switch (RoHS)
NSM-205PFT-24V CR	Multi-mode, ST Connector, 4-port 10/100 Mbps PoE (PSE) with 1 Fiber port and 24 VDC 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 VDC Input Switch; metal case (RoHS)
NSM-205PFCS-24V CR	Single-mode 30 km, SC Connector, 4-port 10/100 Mbps PoE (PSE) with 1 Fiber port and 24 VDC Input Switch; metal case (RoHS)
NSM-205PFCS-60-24V CR	Single-mode 60 km, SC Connector, 4-port 10/100 Mbps PoE (PSE) with 1 Fiber port and +24 VDC Input Switch; metal case (RoHS)

◼ Accessories

MDR-60-24 CR	Power Supply, 85~264 VAC to 24 VDC/2.5 A, 60 W, DIN-rail mounting (RoHS)
MDR-60-48 CR	Power Supply, 85~264 VAC to 48 VDC/1.25 A, 60 W, DIN-rail mounting (RoHS)