

Features ▶▶▶

- Auto-detection of PD (powered devices)
- Over-temperature, over-current and over/under-voltage detection
- No user settings
- Power Sourcing Equipment (PSE) operation
- tNS-200IN series supplies up to 15.4W
- tNS-200GIN series supplies up to 30W
- Tiny packaging fits on your DIN-Rail Mounting
- Cost-effective for tNS-200IN/tNS-200GIN series

Introduction

The tNS-200IN/tNS-200GIN series Single Port PoE Injector supports PoE powered devices in industrial environments. The tNS-200IN/tNS-200GIN series delivers both data and power over a single standard Ethernet cable to a PoE Powered Device designed to receive both Data and Power through its RJ-45 port connector.

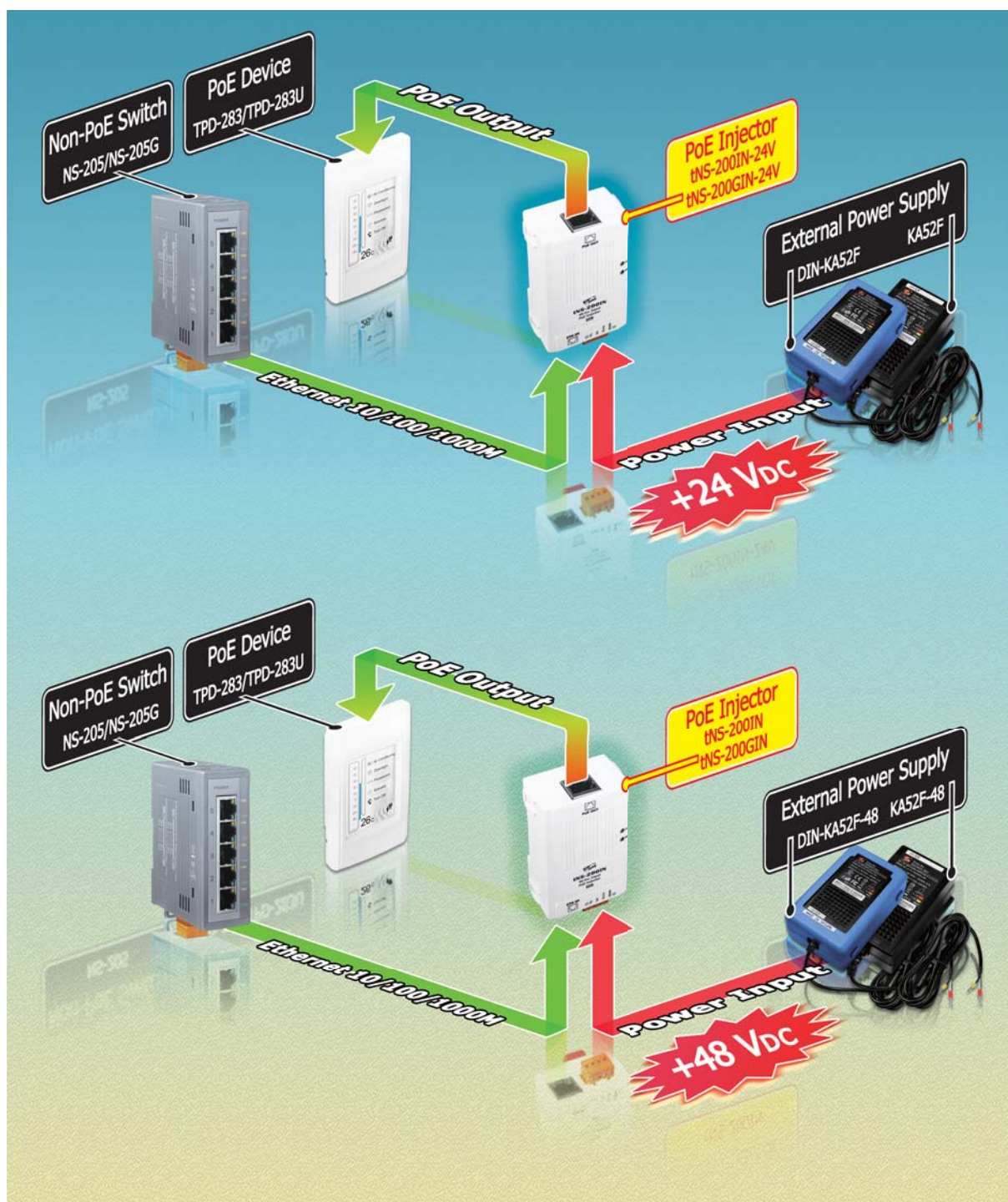
The tNS-200IN-24V/tNS-200GIN-24V is designed with +24 V_{DC} to +48 V_{DC} boost for PoE application where +48 V_{DC} power supply is not available.

Specifications

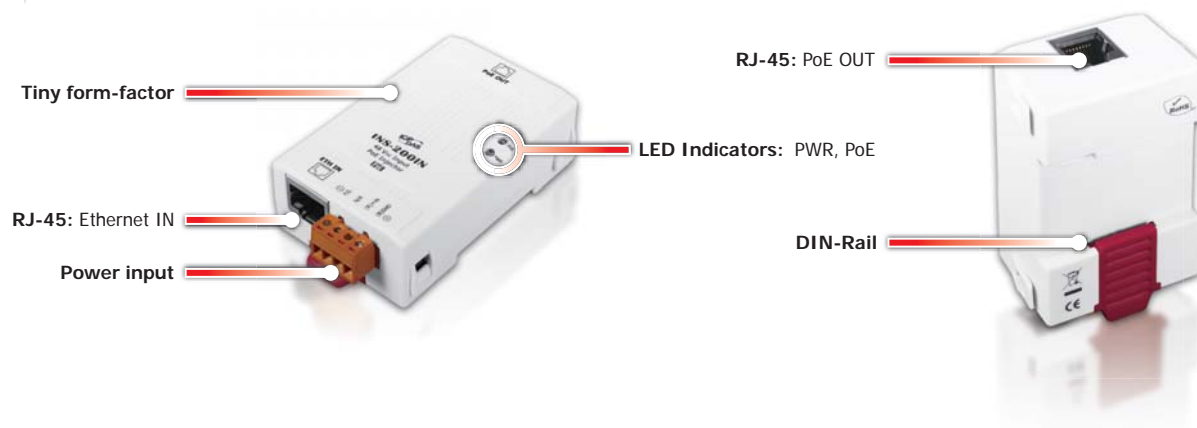
Models	tNS-200IN	tNS-200IN-24V	tNS-200GIN	tNS-200GIN-24V
Interface				
RJ-45 Ports	1 for Ethernet in, 1 for PoE out, 10/100 BaseT(X)		1 for Ethernet in, 1 for PoE out, 10/100/1000 BaseT(X)	
LED Indicators	Power, Power Device is detected			
Power Input				
Input Voltage Range	+46 Vdc ~ +53 Vdc	+18 Vdc ~ +32 Vdc	+46 Vdc ~ +53 Vdc	+18 Vdc ~ +32 Vdc
Power Consumption	0.4 A @ 48 Vdc with PD full loading	0.8 A @ 24 Vdc with PD full loading	0.7 A @ 48 Vdc with PD full loading	1.5 A @ 24 Vdc with PD full loading
Protection	Power reverse polarity protection			
Frame Ground for EMS Protection	Yes			
Connector	4-Pin Removable Terminal Block			
PoE Technology				
PoE Compliance	100% IEEE 802.3af compliant			
PoE Classification	PSE (Power Sourcing Equipment)			
PoE Voltage	+48 Vdc depending on power input			
PoE Power	Up to 15.4 W		Up to 30 W	
PoE Operation	Automatic detection and power management			
PoE Pin Assignments	V+ (Pin 4, 5), V- (Pin 7, 8)			
PoE Disconnect Mode	DC disconnect			

Models	tNS-200IN	tNS-200IN-24V	tNS-200GIN	tNS-200GIN-24V
Mechanical				
Casing	Plastic (Flammability UL 94V-0)			
Dimensions (W x L x H)	52 mm x 27 mm x 86 mm			
Installation	DIN-Rail Mounting			
Environmental				
Operating Temperature	-40 °C ~ +75 °C			
Storage Temperature	-40 °C ~ +85 °C			
Ambient Relative Humidity	10 ~ 90% RH, non-condensing			

Applications



Appearance



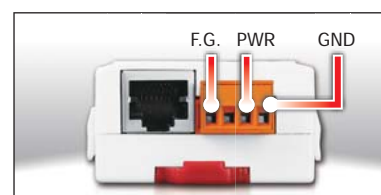
Pin Function for Terminal Block

External power supply is connected using the removable terminal block:

PWR: Power input and should be connected to the power supply (+)

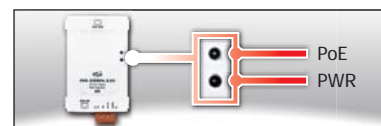
GND: Ground and should be connected to the power supply (-)

F.G.: F.G. stands for Frame Ground (protective ground). It is optional. If you use this pin, it can reduce EMI radiation; improve EMI performance and ESD protection.

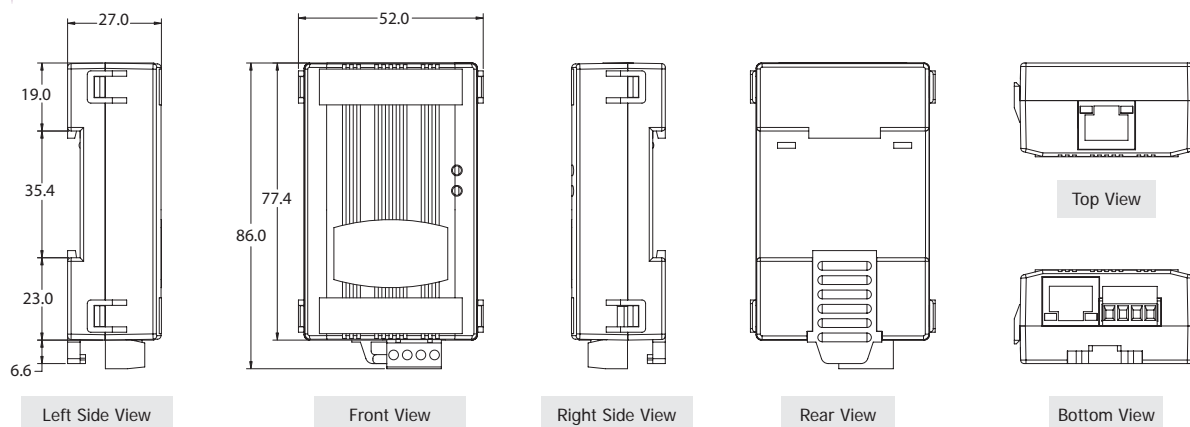


LED Indicator Functions

LED	Color	Description
PoE	Orange On	Power Device is detected
PWR	Red On	Power is On
	Red Off	Power is Off



Dimensions (Units: mm)



Ordering Information

tNS-200IN CR	10/100 Base-TX, PoE injector for 1 PoE port (uses spare pairs), +48 Vdc input, PoE 15.4W (RoHS)
tNS-200IN-24V CR	10/100 Base-TX, PoE injector for 1 PoE port (uses spare pairs), +24 Vdc input, PoE 15.4W (RoHS)
tNS-200GIN CR	10/100/1000 Base-TX, PoE injector for 1 PoE port (uses spare pairs), +48 Vdc input, PoE 30W (RoHS)
tNS-200GIN-24V CR	10/100/1000 Base-TX, PoE injector for 1 PoE port (uses spare pairs), +24 Vdc input, PoE 30W (RoHS)

Accessories

MDR-60-48	48 V/1.25 A, 60 W Power Supply with DIN-Rail Mounting
MDR-60-24	24 V/2.50 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
DIN-KA52F	24 V/1.04 A, 25 W Power Supply with DIN-Rail Mounting