

PoE injector (RoHS)



## 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.

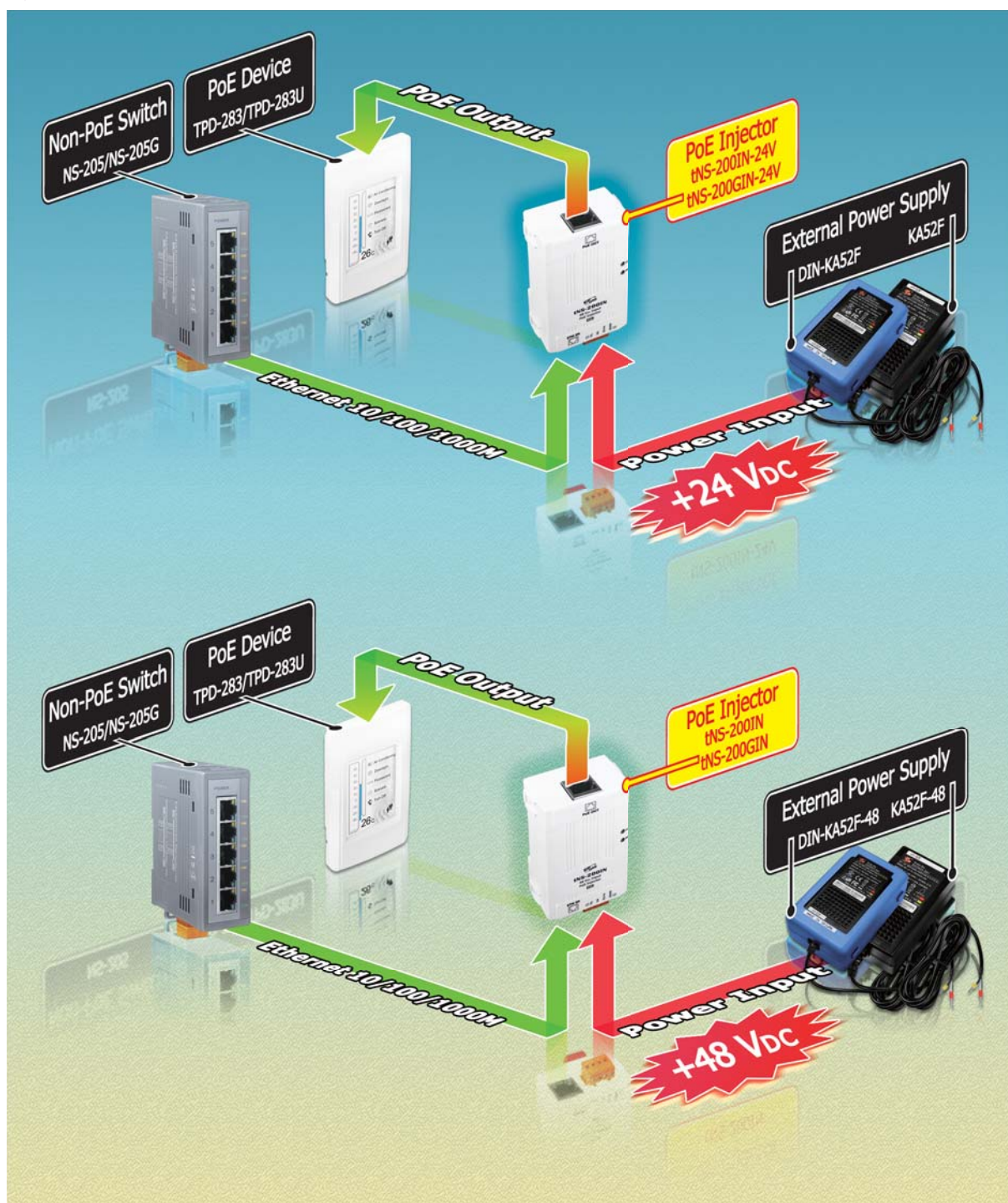
The tNS-200IN-24V/tNS-200GIN-24V is designed with +24 V<sub>dc</sub> to +48 V<sub>dc</sub> boost for PoE application where +48 V<sub>dc</sub> power supply is not available.

## Specifications

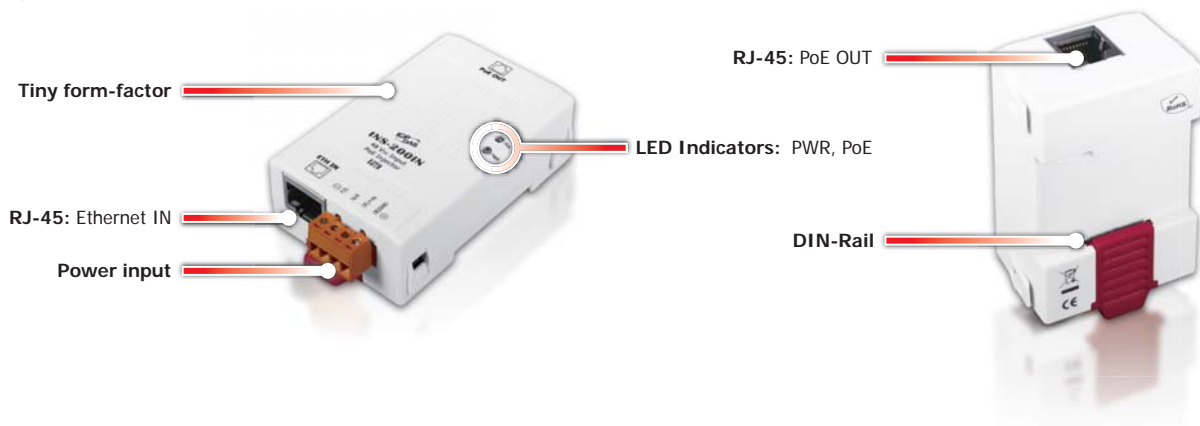
Models	tNS-200IN	tNS-200IN-24V	tNS-200GIN	tNS-200GIN-24V
<b>Interface</b>				
RJ-45 Ports	1 for Ethernet in, 1 for PoE out, 10/100 BaseT(X)		1 for Ethernet in, 1 for PoE out, 10/100/1000 BaseT(X)	
LED Indicators	Power, Power Device is detected			
<b>Power Input</b>				
Input Voltage Range	+46 V <sub>dc</sub> ~ +53 V <sub>dc</sub>	+18 V <sub>dc</sub> ~ +32 V <sub>dc</sub>	+46 V <sub>dc</sub> ~ +53 V <sub>dc</sub>	+18 V <sub>dc</sub> ~ +32 V <sub>dc</sub>
Power Consumption	0.4 A @ 48 V <sub>dc</sub> with PD full loading	0.8 A @ 24 V <sub>dc</sub> with PD full loading	0.7 A @ 48 V <sub>dc</sub> with PD full loading	1.5 A @ 24 V <sub>dc</sub> with PD full loading
Protection	Power reverse polarity protection			
Frame Ground for EMS Protection	Yes			
Connector	4-Pin Removable Terminal Block			
<b>PoE Technology</b>				
PoE Compliance	100% IEEE 802.3af compliant			
PoE Classification	PSE (Power Sourcing Equipment)			
PoE Voltage	+48 V <sub>dc</sub> 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
<b>Mechanical</b>				
Casing	Plastic (Flammability UL 94V-0)			
Dimensions (W x L x H)	52 mm x 27 mm x 86 mm			
Installation	DIN-Rail Mounting			
<b>Environmental</b>				
Operating Temperature	-40 °C ~ +75 °C			
Storage Temperature	-40 °C ~ +85 °C			
Ambient Relative Humidity	10 ~ 90% RH, non-condensing			

## Applications



## Appearance



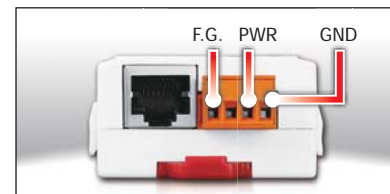
## Pin Function for Terminal Block

External power supply is connected using the removable terminal block:

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

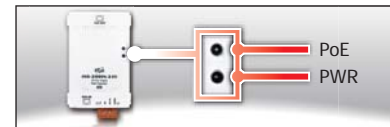
**GND:** Ground and should be connected to the power supply (-)

**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.

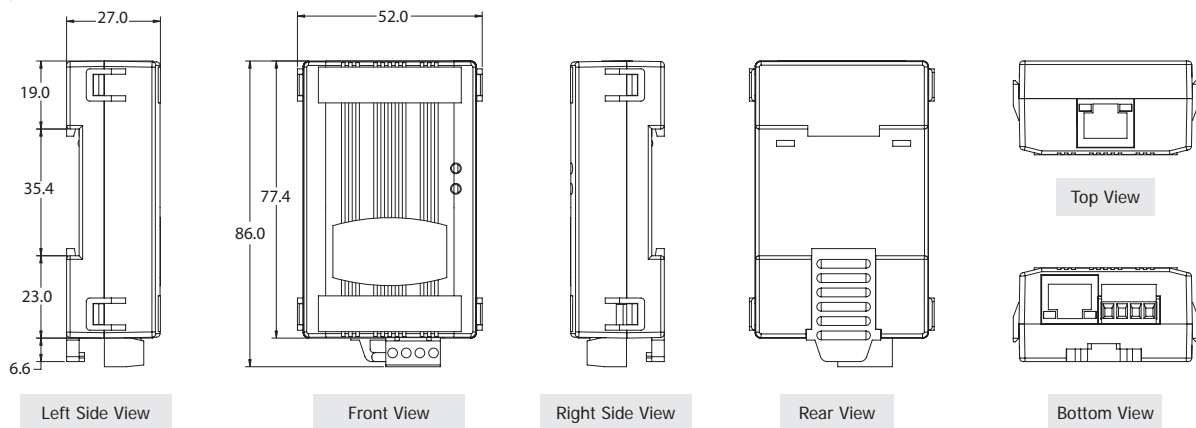


## LED Indicator Functions

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