

# tNS-200IN/tNS-200IN-24V *NEW*

# tNS-200GIN/tNS-200GIN-24V *NEW*

PoE injector (RoHS)



tNS-200IN/tNS-200GIN series

PoE + LAN  
x1

-40 ~ +75  
Wide Temperature

DIN-Rail Mount

CE

FCC

RoHS

WEEE

For tNS-200IN/tNS-200GIN

+46 ~ +53  
Input Voltage

Cost-effective

## 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.

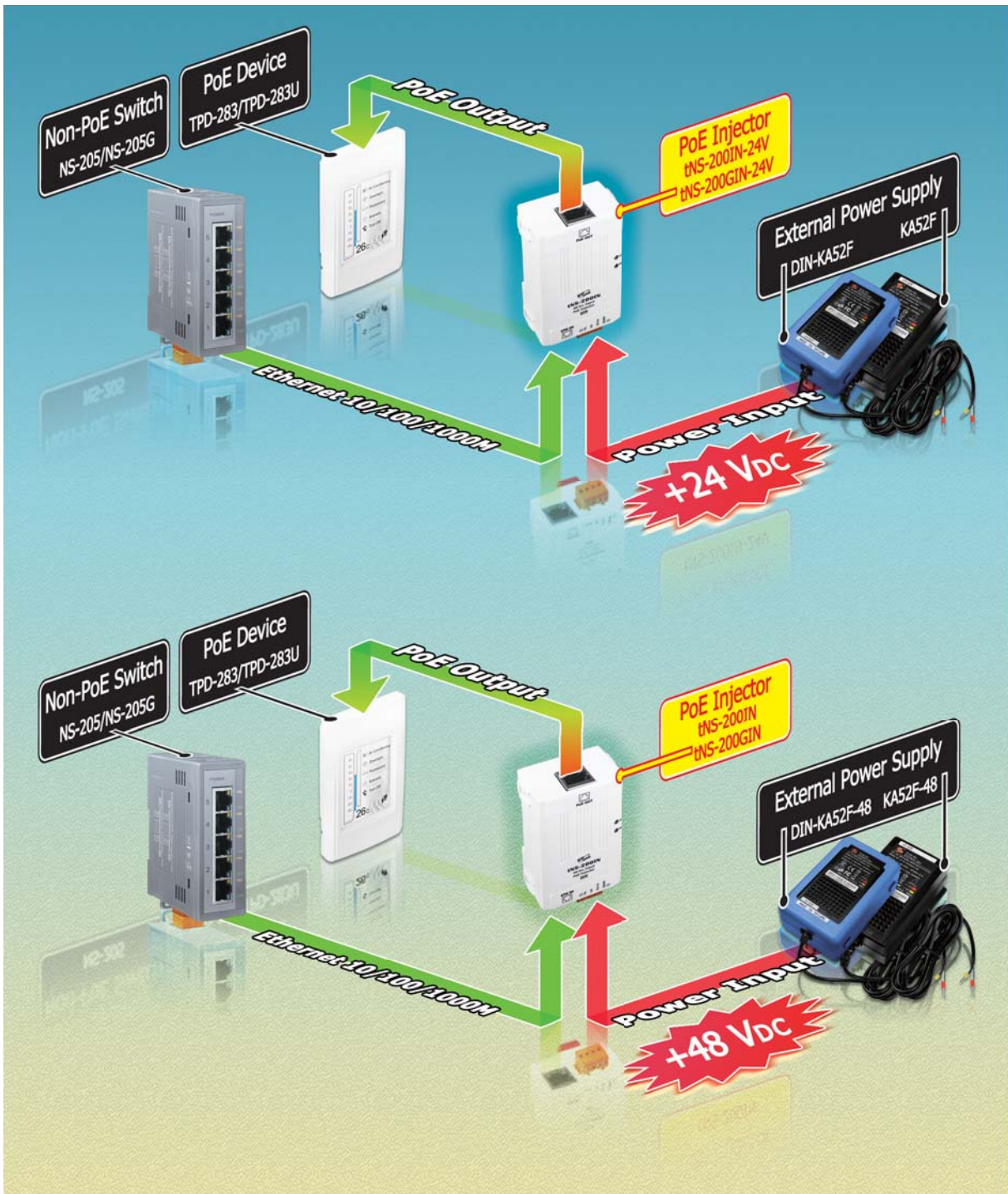
The tNS-200IN-24V/tNS-200GIN-24V is designed with +24 V<sub>dc</sub> to +48 V<sub>dc</sub> boost for PoE application where +48 V<sub>dc</sub> power supply is not available.

## Specifications

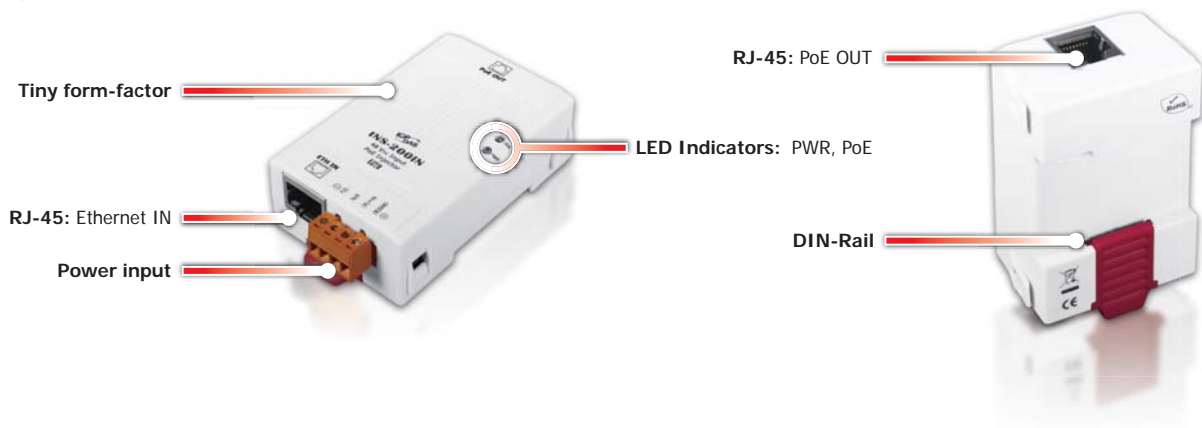
| Models                          | tNS-200IN   | tNS-200IN-24V                                   | tNS-200GIN   | tNS-200GIN-24V                                  |
|---------------------------------|---|---|--|---|
| <b>Interface</b>                |   |   |  |   |
| RJ-45 Ports                     | 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



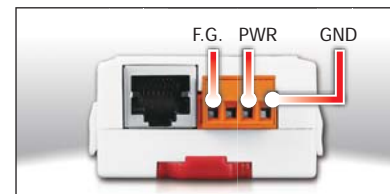
## Pin Function for Terminal Block

External power supply is connected using the removable terminal block:

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

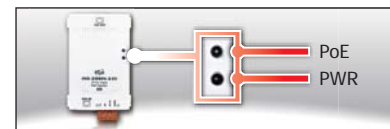
**GND:** Ground and should be connected to the power supply (-)

**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.

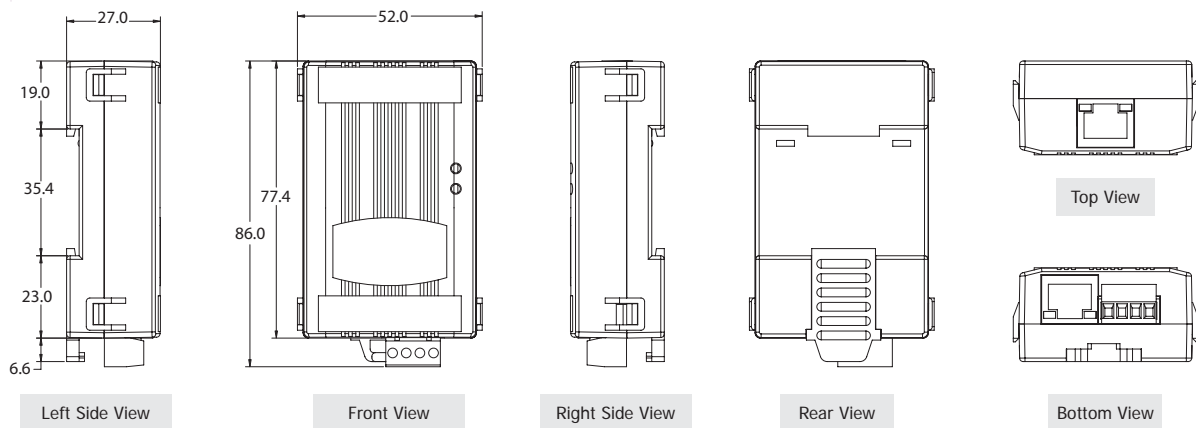


## LED Indicator Functions

| 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 |