

# tNS-2001N/tNS-2001N-24V NEW tNS-200GI N/ tNS-200GI N-24V NEW

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-2001N 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-2001N/tNS-200GIN series Single Port PoE Injector supports PoE powered devices in industrial environments. The tNS-2001N/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 Vpc to +48 Vpc boost for PoE application where +48 Vpc power supply is not available.

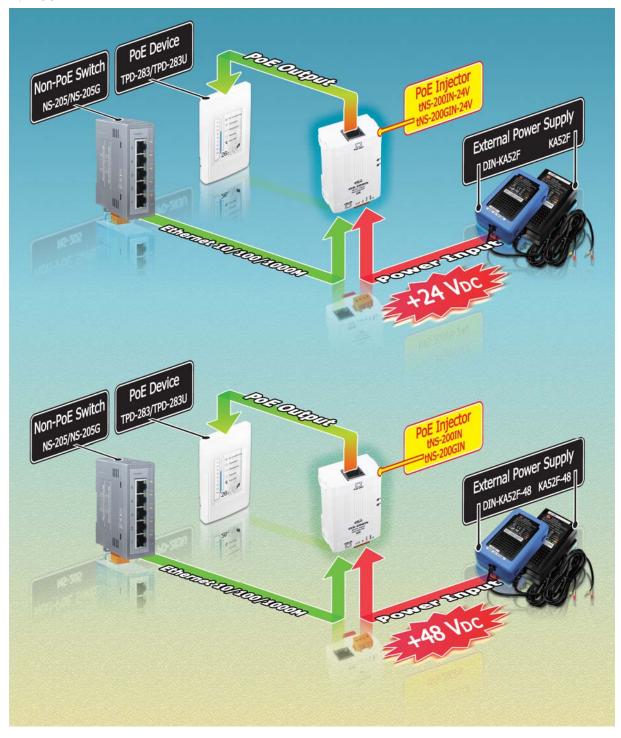


### Specifications

| Models                          | tNS-2001N   | tNS-2001N-24V                       | tNS-200GIN   | tNS-200GI N-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 I nput                    |   |                                     |  |                                     |
| I nput Voltage Range            | +46 VDC ~ +53 VDC                                 | + 18 VDC ~ + 32 VDC                 | +46 VDC ~ +53 VDC                                      | + 18 VDC ~ + 32 VDC                 |
| Power Consumption               | 0.4 A @ 48 Vpc with PD full loading               | 0.8 A @ 24 Vpc with PD full loading | 0.7 A @ 48 Vpc with PD full loading                    | 1.5 A @ 24 Vpc 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 Vpc 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                                     |                                     |  |                                     |

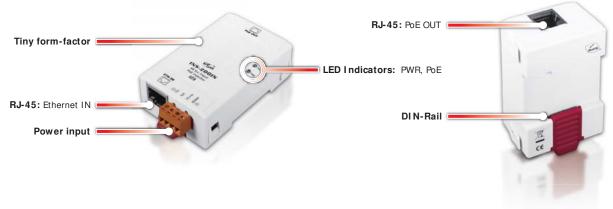
| Models                    | tNS-2001N                   | tNS-2001N-24V | tNS-200GIN | tNS-200GIN-24V |
|---------------------------|-----------------------------|---------------|------------|----------------|
| Mechanical                |                             |               |            |                |
| Casing                    | Plastic (Flammability UL 94 | V-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-conden     | sing          |            |                |

## Applications





## Appearance



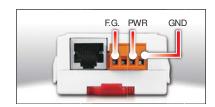
## - Pin Function for Terminal Block

External power supply is connected using the removable terminal block:

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

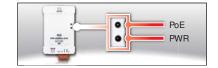
GND: Ground and should be connected to the power supply (-)

**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.

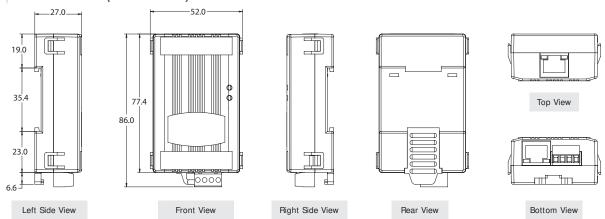


#### **LED** Indicator Functions

| LED | Color Description |                          |  |
|-----|-------------------|--------------------------|--|
| PoE | Orange On         | Power Device is detected |  |
| PWR | Red On            | Power is On              |  |
| PWR | 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 Vpc input, PoE 15.4W (RoHS)    |
|-------------------|--|
| tNS-2001N-24V CR  | 10/100 Base-TX, PoE injector for 1 PoE port (uses spare pairs), +24 Vpc input, PoE 15.4W (RoHS)    |
| tNS-200GIN CR     | 10/100/1000 Base-TX, PoE injector for 1 PoE port (uses spare pairs), +48 Voc input, PoE 30W (RoHS) |
| tNS-200GIN-24V CR | 10/100/1000 Base-TX, PoE injector for 1 PoE port (uses spare pairs), +24 Voc 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 |