

# TRENDNET®



## Quick Installation Guide

### PoE Unmanaged Industrial Switch (V1)

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## **1 English**

1. Before You Start
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# 1. Before You Start

## Package Contents

- TI-PE50 / TI-PE80 / TI-PG541 / TI-PG62 / TI-PG62B / TI-PG50 / TI-PG80 / TI-PG102 / TI-PG160 / TI-UPG62 / TI-PG162 / TI-PG80B
- Quick Installation Guide
- Removable terminal block
- DIN-Rail mount
- Wall mount kit (not included with TI-PG541)

## Minimum Requirements

- Existing network
- Power Supply

PoE+ Unmanaged Industrial Switch Model PoE Power Budget / DC Input Requirement.

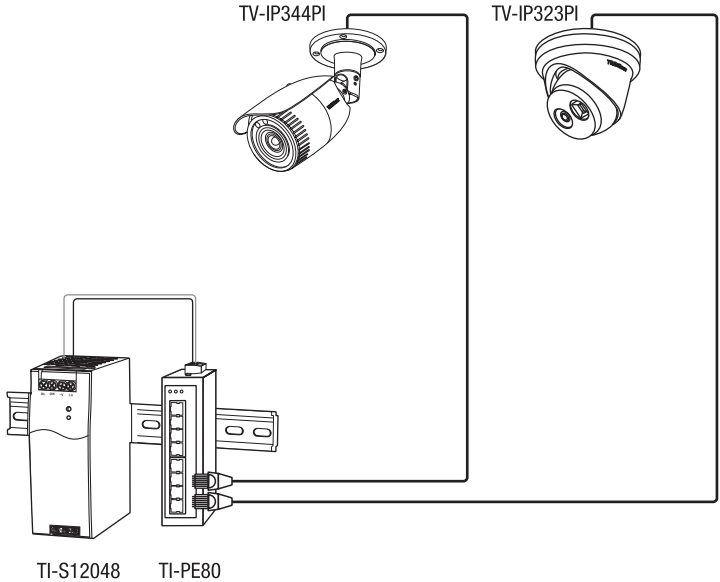
Switch Model	Switch Power Consumption (No PoE Load)	PoE Power Budget	DC Input Voltage Range
TI-PE50	2.24W	90W	48 – 56V
TI-PE80	5.76W	200W	48 – 56V
TI-PG541	10W	120W	48 – 57V
TI-PG62	5.76W	120W	48 – 56V
TI-PG62B	5.76W	60 – 120W	12 – 56V
TI-PG50	5.76W	120W	48 – 56V
TI-PG80	5.76W	200W	48 – 56V
TI-PG102	5.67W	240W	48 – 56V
TI-PG160	13W	240W	48 – 56V
TI-UPG62 (V1.0R)	5.76W	240W	48 – 56V
TI-UPG62 (V2.0R)	6.2W	240W	52 – 56V
TI-PG162	13W	240W	48 – 56V
TI-PG80B	5.3W	120 – 200W	24 – 56V

Power Supply Model	Max. Power Supplied	DC Output	Type	Note
TI-M6024	60W	24V / 2.5A	DIN-Rail	
TI-S12024	120W	24V / 5A	DIN-Rail	
TI-S12048	120W	48V / 2.5A	DIN-Rail	
TI-S24048	240W	48V / 5A	DIN-Rail	
TI-S48048	480W	48V / 10A	DIN-Rail	
48VDC3000	160W	48V / 3.34A	Power Adapter (4-pin DIN type connector)	Compatible only with TI-PG541 / TI-PG541i / TI-PG62 / TI-PG102 / TI-PG160 / TI-PG162

**Note:** Select the appropriate power supply according to the switch model you have purchased. When choosing the appropriate power supply, please take into consideration that the switch will also consume some of the power budget supplied in addition to the PoE power budget requirement.

## 2. Quick Reference

**Note:** The switch model and power supply may be different than the one shown in the example below.



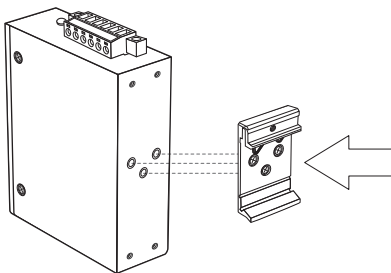
### 3. Hardware Installation

The switch can be placed on a desktop, wall, or mounted to a DIN-Rail.

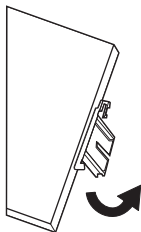
#### DIN-Rail Mounting Instructions

1. Attach the DIN-rail mount bracket to the switch.

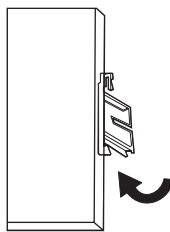
**Note:** The switch may be different than the one shown in the examples below.



2. Position the unit in front of the DIN-Rail and hook the mount bracket over the top of the rail.
3. Rotate the unit downward towards the rail to lock it into place. You will know it is secure when you hear the click.



**Mounting the unit**



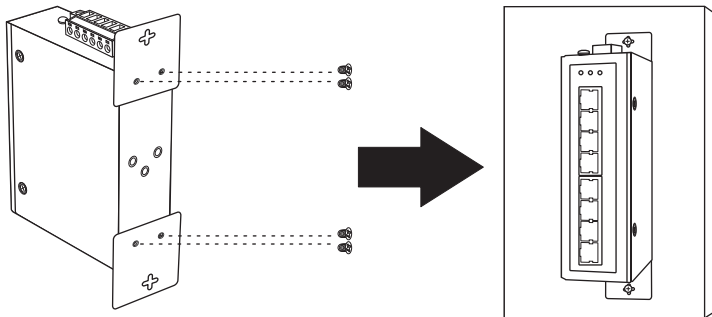
**Releasing the unit**

4. To remove the unit, pull down to clear the bottom of the DIN-Rail and rotate up, away from the rail.

## Wall Mounting Instructions

**Note:** Please note that the TI-PG541 does not include a wall mounting kit.

1. Attach the wall mount plates to switch.
2. Mount the switch.



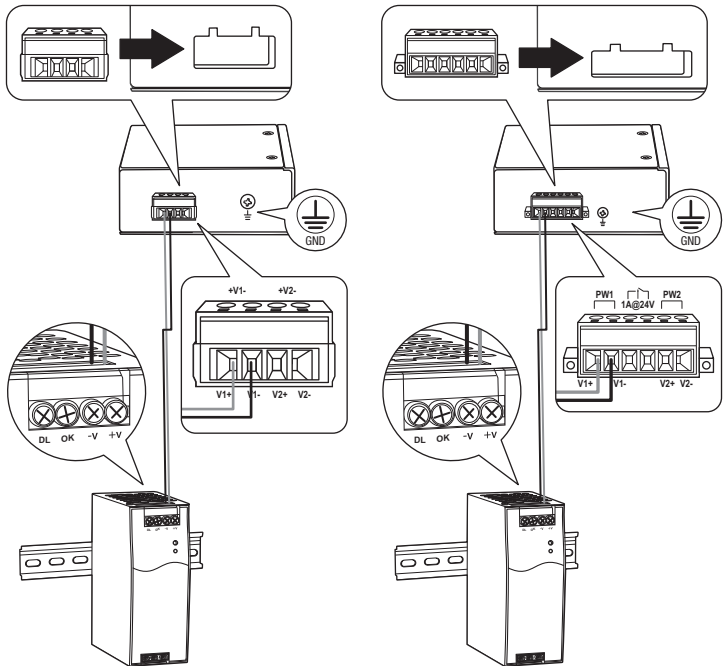
## Applying Power

1. Connect the power supply (sold separately) to the included terminal block (as shown below) and secure with the screws.

**Note:** Polarities must match.

2. Attach the terminal block to the unit, connect the ground wire to the ground, and supply power to the power adapter.

**Note:** The switch model and power supply may be different than the one shown in the example below. Terminal blocks may be 4-pin (dual power input only) or 6-pin (dual power input with alarm relay output) with differences in labeling.

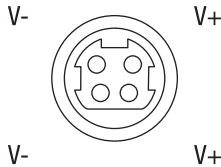




3. Connect a network source and devices to the switch. Check the LEDs to confirm the connections are established. Your installation is completed.

**Note:** Please refer to the LED definition section on page 8-14 for reference to your switch model.

If available on your switch (TI-PG541 / TI-PG62 / TI-PG102 / TI-PG160 / TI-PG162), the 4-pin DIN type connector can also be used as an additional power input (48VDC3000 power adapter sold separately).



### Safety Note



- Turn off the power before connecting any module or wire. The correct power supply voltage is listed on the product label. Check the voltage of your power source to make sure that you are using the correct part. Do NOT use voltage greater than the maximum listed on the product label.
- Calculate the maximum possible current in each power wire and common wire. Observe all electrical codes dictating the maximum current allowable for each wire size. If the current surpasses the maximum ratings, the wiring could overheat, causing serious damage to your equipment.

## LED Definition Reference

TI-PG541		
	Status	Description
<b>PWR</b>	Solid Green	Power is Connected
	Off	Power is Not Detected
<b>RPS</b>	Solid Green	Power is Detected
	Off	Power is Not Detected
<b>ALM</b>	Solid Red	Either PWR or RPS is disconnected (Based on DIP switch settings)
	Off	Both PWR and RPS are connected and powered, Dependent on DIP switch settings
<b>LNK/ACT</b>	Solid Green	Connected
	Flashing Green	Data Transmitting / Receiving
	Off	No Connection
<b>1000M</b>	Solid Green	Connected at 1000M
	Off	Connected at 10/100M
<b>1000M SFP</b>	Solid Green	Connected
	Flashing Green	Data Transmitting / Receiving
	Off	No Connection
<b>POE+, 1, 2, 3, 4</b>	Solid Green	PoE is connected
	Flashing Green	PoE is being detected
	Off	No PoE

<b>TI-UPG62</b>		
	<b>Status</b>	<b>Description</b>
<b>PW1</b>	Solid Green	Power is Connected
	Off	Power is Not Detected
<b>PW2</b>	Solid Green	Power is Detected
	Off	Power is Not Detected
<b>ERR</b>	Solid Amber	Connected only PW1 or PW2
	Off	Both PW1 and PW2 are connected and powered
<b>LNK</b>	Solid Green	Connected
	Flashing Green	Data Transmitting / Receiving
	Off	No Connection
<b>SPD</b>	Solid Amber	Connected at 1000M
	Off	Connected at 10/100M
<b>SFP (F5,F6)</b>	Solid Green	Connected
	Flashing Green	Data Transmitting / Receiving
	Off	No Connection
<b>POE (P1, P2, P3, P4)</b>	Solid Green	PoE is connected
	Flashing Green	PoE is being detected
	Off	No PoE

<b>TI-PG62</b>		
	<b>Status</b>	<b>Description</b>
<b>PW1, P1</b>	Solid Green	Power is Detected
	Off	Power is Not Detected
<b>PW2, P2, RPS</b>	Solid Green	Power is Detected
	Off	Power is Not Detected
<b>PW3</b>	Solid Amber	Power is Detected
	Off	Power is Not Detected
<b>RLY</b>	Solid Amber	Connected only PW1, PW2, PW3
	Off	Two of the PW1, PW2, PW3 are connected and powered
<b>LNK</b>	Solid Green	Connected
	Flashing Green	Data Transmitting / Receiving
	Off	No Connection
<b>SFP (F5, F6)</b>	Solid Green	Connected
	Flashing Green	Data Transmitting / Receiving
	Off	No Connection
<b>PoE</b>	Solid Green	PoE is connected
	Flashing Green	PoE is being detected
	Off	No PoE

<b>TI-PG62B</b>		
	<b>Status</b>	<b>Description</b>
<b>PW1</b>	Solid Green	Power is Detected
	Off	Power is Not Detected
<b>PW2</b>	Solid Green	Power is Detected
	Off	Power is Not Detected
<b>ERR</b>	Solid Amber	Connected only PW1 or PW2
	Off	Both PW1 and PW2 are connected and powered
<b>LNK</b>	Solid Green	Connected
	Flashing Green	Data Transmitting / Receiving
	Off	No Connection
<b>SPD</b>	Solid Amber	Connected at 1000M
	Off	Connected at 10/100M
<b>SFP (F5, F6)</b>	Solid Green	Connected
	Flashing Green	Data Transmitting / Receiving
	Off	No Connection
<b>POE (P1, P2, P3, P4)</b>	Solid Green	PoE is connected
	Flashing Green	PoE is being detected
	Off	No PoE

<b>TI-PG102</b>		
	<b>Status</b>	<b>Description</b>
<b>P1</b>	Solid Green	Power is Detected
	Off	Power is Not Detected
<b>P2</b>	Solid Green	Power is Detected
	Off	Power is Not Detected
<b>P3</b>	Solid Amber	Power is Detected
	Off	Power is Not Detected
<b>RLY</b>	Solid Amber	Connected only PW1 or PW2
	Off	Both PW1 and PW2 are connected and powered
<b>LINK, LNK/ACT</b>	Solid Green	Connection
	Flashing Green	Data Transmitting / Receiving
	Off	No Connection
<b>SFP (F9, F10)</b>	Solid Green	Connected
	Flashing Green	Data Transmitting / Receiving
	Off	No Connection
<b>PoE</b>	Solid Amber	PoE is connected
	Flashing Amber	PoE is being detected
	Off	No PoE

<b>TI-PE50 / TI-PE80 / TI-PG50 / TI-PG80 / TI-PG80B</b>		
	<b>Status</b>	<b>Description</b>
<b>PW1</b>	Solid Green	Power is Detected
	Off	Power is Not Detected
<b>PW2</b>	Solid Green	Power is Detected
	Off	Power is Not Detected
<b>RLY (TI-PE80, TI-PG80, &amp; TI-PG80B ONLY)</b>	Solid Amber	Connected only PW1 or PW2
	Off	Both PW1 and PW2 are connected and powered
<b>LNK</b>	Solid Green	Connected
	Flashing Green	Data Transmitting / Receiving
	Off	No Connection
<b>POE</b>	Solid Amber	PoE is connected
	Flashing Amber	PoE is being detected
	Off	No PoE

<b>TI-PG160 / TI-PG162</b>		
	<b>Status</b>	<b>Description</b>
<b>P1</b>	Solid Green	Power is Detected
	Off	Power is Not Detected
<b>P2</b>	Solid Green	Power is Detected
	Off	Power is Not Detected
<b>P3</b>	Solid Amber	Power is Detected
	Off	Power is Not Detected
<b>RLAY</b>	Solid Amber	Connected only PW1 or PW2
	Off	Both PW1 and PW2 are connected and powered
<b>LNK</b>	Solid Green	Connection
	Flashing Green	Data Transmitting / Receiving
	Off	No Connection
<b>SFP (F15, F16) (TI-PG162 ONLY)</b>	Solid Green	Connected
	Flashing Green	Data Transmitting / Receiving
	Off	No Connection
<b>PoE</b>	Solid Amber	PoE is connected
	Flashing Amber	PoE is being detected
	Off	No PoE



# Declaration of Conformity

**TRENDNET**<sup>®</sup>

## Manufacturer's Name and Address

TRENDnet, Inc.  
20675 Manhattan Place  
Torrance, CA 90501 USA

Zwolsestraat 156 2587 WB  
The Hague The Netherlands



## Product Information:

TI-PE50 / TI-PE80 / TI-PG541 / TI-PG62 / TI-PG62B / TI-PG50 / TI-PG80 /  
TI-PG102 / TI-PG160 / TI-UPG62 / TI-PG162 / TI-PG80B

5-Port Industrial Fast Ethernet PoE+ DIN-Rail Switch / 8-Port Industrial Fast Ethernet PoE+ DIN-Rail Switch /  
5-Port Hardened Industrial Gigabit PoE+ DIN-Rail Switch / 6-Port Hardened Industrial Gigabit PoE+ DIN-Rail Switch /  
6-Port Industrial Gigabit PoE+ DIN-Rail Switch (12 – 56 V) / 5-Port Industrial Gigabit PoE+ DIN-Rail Switch /  
5-Port Hardened Industrial Gigabit PoE+ DIN-Rail Switch / 10-Port Industrial Gigabit PoE+ DIN-Rail Switch /  
16-Port Industrial Gigabit PoE+ DIN-Rail Switch / 6-Port Hardened Industrial Gigabit Ultra PoE DIN-Rail Switch /  
16-Port Industrial Gigabit PoE+ DIN-Rail Switch / 8-Port Industrial Gigabit PoE+ DIN-Rail Switch (24 – 56V)

**Trade Name:** TRENDnet

TRENDnet hereby declare that the product is in compliance with the essential requirements and other relevant provisions under our sole responsibility.

<b>EMC</b>	EN 55022: 2010 / AC: 2011 (Class A) (TI-PG541)	EN 61000-4-3: 2006 + A1: 2008 + A2: 2010
	EN 55032: 2015 + AC: 2016 (Class A)	EN 61000-4-4: 2012
	EN 55024: 2010 (TI-PG541)	IEC 61000-4-5: 2014 (TI-PG541)
	EN 55024: 2010 + A1: 2015	EN 61000-4-5: 2014 + A1: 2017
	EN 55011: 2009 + A1: 2010 (Group I, Class A) (TI-PG541)	IEC 61000-4-6: 2013 (TI-PG541)
	EN 61000-3-2: 2014 (TI-PG541)	EN 61000-4-6: 2013 + AC: 2015
	EN 61000-3-3: 2013 (TI-PG541)	IEC 61000-4-8: 2009 (TI-PG541)
	EN 61000-4-2: 2008 (TI-PG541)	IEC 61000-4-11: 2004 (TI-PG541)
	EN 61000-4-2: 2009	EN 61000-4-8: 2010
	EN 61000-4-3: 2006 + A1: 2007 + A2: 2010 (TI-PG541)	EN 61000-6-4: 2007 + A1: 2011 (TI-PG541)
		EN 61000-6-2: 2005 (TI-PG541)

This product is herewith confirmed to comply with the Directives.

**Directives:** Low Voltage Directive 2014/35/EU  
EMC Directive 2004/108/EC (TI-PG541)  
EMC Directive 2014/30/EU  
RoHS Directive 2011/65/EU  
REACH Regulation (EC) No. 1907/2006

Person responsible for this declaration.

Place of Issue: Torrance, California, USA

Date: October 29, 2019

Name: Sonny Su

Title: Director of Technology

Signature:



## Certifications

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference.
- (2) This device must accept any interference received.

Including interference that may cause undesired operation.



Waste electrical and electronic products must not be disposed of with household waste. Please recycle where facilities exist. Check with your Local Authority or Retailer for recycling advice.

Applies to PoE Products Only: This product is to be connected only to PoE networks without routing to the outside plant.

## Note

The Manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

## Advertencia

En todos nuestros equipos se mencionan claramente las características del adaptador de alimentación necesario para su funcionamiento. El uso de un adaptador distinto al mencionado puede producir daños físicos y/o daños al equipo conectado. El adaptador de alimentación debe operar con voltaje y frecuencia de la energía eléctrica domiciliar existente en el país o zona de instalación.

## Technical Support

If you have any questions regarding the product installation, please contact our Technical Support.

Toll free US/Canada: **1-855-373-4741**

Regional phone numbers available at [www.trendnet.com/support](http://www.trendnet.com/support)

## TRENDnet

20675 Manhattan Place  
Torrance, CA 90501  
USA

## Product Warranty Registration

Please take a moment to register your product online. Go to TRENDnet's website at: [www.trendnet.com/register](http://www.trendnet.com/register)