



## 5-Port Hardened Industrial Gigabit PoE+ DIN-Rail Switch

TI-PG541 (v1.1R)

- 4 x Gigabit PoE+ (802.3at) ports, 1 x Gigabit port, and 1 x Gigabit SFP slot
- 120 W full PoE+ power budget
- 12 Gbps switching capacity
- Hardened IP30 rated metal switch with integrated DIN-Rail mount
- -40 to 70 °C (-40 to 158 °F) operating temperature range
- Dual redundant power inputs with overload current protection
- Alarm output triggered by power failure
- Power adapter sold separately
- Limited Lifetime Warranty

TRENDnet's TI-PG541 is a reliable IP30 unmanaged PoE+ DIN-rail switch with hardened components rated for extreme industrial environments. It offers four Gigabit PoE+ ports (Ports 1-4, 802.3at), one Gigabit port, one SFP slot, and a full PoE power budget of 120 Watts. Dual redundant power inputs (power adapter sold separately) with overload current protection support zero downtime requirements. An alarm output can be triggered by a primary and/or redundant power failure.



### Full PoE+ Power Budget

Supplies up to 30 Watts of PoE/PoE+ power per port (ports 1-4 802.3at/802.3af) with a 120 Watt PoE power budget



### Network Ports

5 x Gigabit Ethernet ports (port 1-4 PoE/PoE+) and 1 x SFP slot



### Integrated DIN-Rail Mount

IP30 rated metal enclosure with integrated DIN-rail mounting hardware



### Switching Capacity

12 Gbps switching capacity



### Redundant Power

Dual redundant power inputs with overload current protection (power adapter sold separately: model 48VDC3000)



### Alarm Output

Alarm output triggered by power failure of primary and/or redundant power (defined by DIP switch)



### Jumbo Frame

Sends larger packets, or Jumbo Frames (up to 10 KB), for increased performance



### Extreme Temperatures

Hardened switch is rated for an operating temperature range of -40 to 70 °C (-40 to 158 °F)



### Electro Magnetic Compliance

Complies with IEC61000-6-2 EMC generic standard immunity for industrial environments



### Shock and Vibration Resistant

Rated for shock (IEC 60068-2-27), freefall (IEC 60068-2-32), and vibration (IEC 60068-2-6)



### LED Indicators

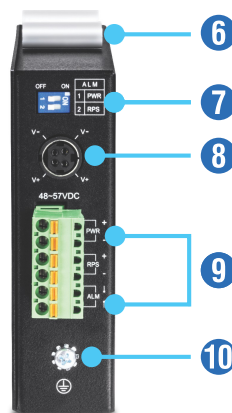
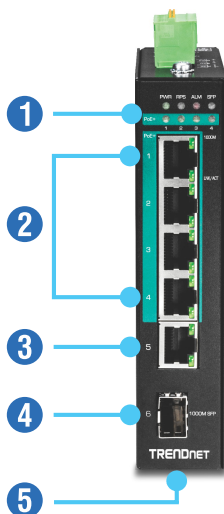
LED indicators convey power, redundant power, alarm, SFP, and network port status



### Grounding Point

Grounding point protects equipment from external electrical surges

## Networking Solution



- 1 LED indicators
- 2 Gigabit PoE+ ports
- 3 Gigabit port
- 4 SFP slot
- 5 Reset button
- 6 Integrated DIN-Rail mount
- 7 DIP switches
- 8 DC power connector
- 9 6-pin terminal block
- 10 Grounding point

## Specifications

### Standards

- IEEE 802.3
- IEEE 802.3u
- IEEE 802.3ab
- IEEE 802.3z
- IEEE 802.3at
- IEEE 802.3af
- IEEE 802.3x

### Device Interface

- 4 x Gigabit PoE+ ports
- 1 x Gigabit port
- 1 x Gigabit SFP slot
- 6-pin terminal block (removable)
- DIP switch
- DC power connector
- LED indicators
- Integrated DIN-Rail mount

### Data Transfer Rate

- Ethernet: 10 Mbps (half duplex), 20 Mbps (full duplex)
- Fast Ethernet: 100 Mbps (half duplex), 200 Mbps (full duplex)
- Gigabit: 2000 Mbps (full duplex)
- SX/LX: 2000 Mbps (full duplex)

### Performance

- Data RAM Buffer: 512 KB
- Switching Fabric: 12 Gbps
- MAC Address Table: 8 K entries

- Jumbo Frame: 10 KB
- Forwarding rate: 8.9 Mpps (64-byte packet size)

### Special Features

- Full PoE+ power to each PoE+ port
- Hardened components rated for extreme temperatures
- Dual redundant power inputs
- Alarm output triggered by power failure
- Auto-Negotiation
- Auto store and forward architecture
- Automatic address learning and address aging
- ESD 8 KV and Surge 6 KV protection

### Power Adapter (48VDC3000, Sold Separately)

- Input: 100 - 240 V AC, 50/60 Hz, 2 A
- Output: 48 V DC, 3.34 A 160 watts max.

### Terminal Block

- Input: PWR (Primary): 48 - 57 V DC
- RPS (Redundant): 48 - 57 V DC

### Power Consumption

- Min.: 10 Watts (standby)
- Max.: 130 Watts
- PoE budget: 120 Watts (Max.)

### PoE

- Up to 15.4 watts/port for PoE
- Up to 30 watts/port for PoE+
- PoE: pin 1, 2 for power + and pin 3, 6 for power - (mode A)

### Housing

- IP30 metal case
- Integrated DIN-rail mount
- Grounding point
- 8 KV ESD protection
- 6 KV Surge protection

### MTBF

- 180,136 hrs @ 65 °C
- 435,905 hrs @ 25 °C

### Operating Temperature

- - 40 – 70 °C (- 40 - 158 °F)

### Operating Humidity

- Max. 95 % non-condensing

### Dimensions

- 135 x 100 x 30 mm (5.3 x 3.9 x 1.2 in.)

### Weight

- 500 g (1.2 lbs.)

### Certifications

- CE
- FCC
- Shock (IEC 60068-2-27)
- Freefall (IEC 60068-2-32)
- Vibration (IEC 60068-2-6)

### Warranty

- Limited Lifetime Warranty

### Package Contents

- TI-PG541
- Quick Installation Guide
- DIN-Rail kit

TRENDnet offers a limited lifetime warranty for all of its metal-enclosed network switches that have been purchased in the United States/Canada on or after 1/1/2015. Cooling fan and internal power supply carry a one-year warranty.

