TRENDNET

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

TI-PG541 (v1.0R)

- 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 ℃ (-40 to 158 ℉) 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 ºC (-40 to 158 ºF)

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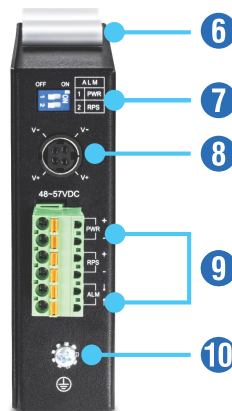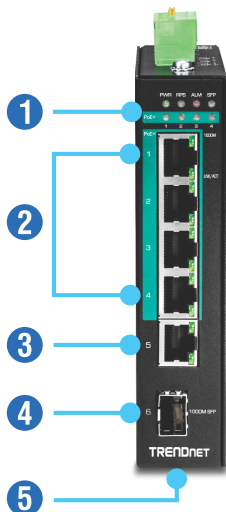
LED Indicators
LED indicators convey power, redundant power, alarm, SFP, and network port status

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

TRENDnet®

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.