

## 5-Port Gigabit PoE++ Powered Managed Switch with PoE Passthrough

TPE-B541 (v1.xR)

- 1 x Gigabit PoE++ input port
- 4 x Gigabit PoE+ output ports
- 60W PoE power budget with PoE++ Type 4 (90W) input power
- Easy-to-use web-based management interface
- Supports RSTP, VLAN, QoS, and IGMP Snooping
- Voice VLAN for VoIP applications
- Bandwidth control per port
- 10Gbps switching capacity
- Compact fanless design
- Wall-mountable metal housing
- Lifetime Warranty
- NDAA / TAA compliant (U.S. and Canada only)

TRENDnet's 5-Port Gigabit PoE++ Powered Managed Switch with PoE Passthrough, model TPE-B541, is powered by a PoE++ switch or injector, no AC adapter is required. The compact PoE++-powered managed switch features four gigabit PoE+ ports to power devices, such as IP cameras, VoIP handsets, and wireless access points, with a 60W total PoE power budget. Reducing unnecessary switch complexity, this PoE++ passthrough managed switch is equipped with management features such as VLANs, QoS, PoE control, and monitoring.



### PoE++ Powered

No AC adapter required—this switch is powered by a PoE++ switch or injector. It features four gigabit PoE+ ports to power PoE devices, such as IP cameras.



### Compact Design

Compact, lightweight, and fanless, this switch is designed for desktops and quiet environments.



### Management

Managed features include loopback detection, RSTP, VLAN, IGMP Snooping, and QoS for flexible network integration.

## FEATURES



#### PoE++ Powered

PD-powered switch, no external power required – powered by a PoE++ switch or injector



#### PoE Passthrough

This PoE passthrough switch features four gigabit PoE passthrough ports with a 60W total PoE power budget



#### Compact Design

With a compact and lightweight metal housing design, this PoE++-powered switch is well-suited for desktop installations



#### Network Management

The web-based management interface on the PoE++ powered managed switch offers features for loopback detection, RSTP, VLAN, IGMP Snooping, and QoS



#### Jumbo Frame

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



#### Switching Capacity

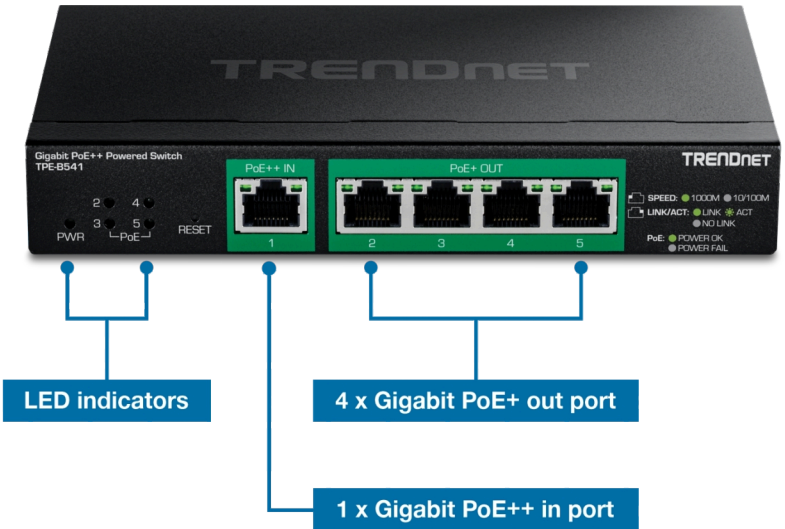
10Gbps switching capacity



#### LED Indicators

LED indicators on the PoE++-powered managed switch convey port status

## NETWORKING SOLUTION



## SPECIFICATIONS

### Standards

- IEEE 802.3
- IEEE 802.3u
- IEEE 802.3ab
- IEEE 802.3x
- IEEE 802.3af
- IEEE 802.3at
- IEEE 802.3bt
- IEEE 802.1d
- IEEE 802.1p
- IEEE 802.1q
- IEEE 802.1w

### Device Interface

- 1 x Gigabit PoE++ in port
- 4 x Gigabit PoE+ out port
- LED indicators
- Wall mount

### Data Transfer Rate

- Ethernet: 10Mbps (half duplex), 20Mbps (full duplex)
- Fast Ethernet: 100Mbps (half duplex), 200Mbps (full duplex)
- Gigabit: 2Gbps (full duplex)

### Performance

- Data RAM Buffer: 512KB
- Switching Fabric: 10Gbps
- MAC Address Table: 8K entries
- Jumbo Frame: 10KB
- Forwarding rate: 7.44Mpps (64-byte packet size)

### Management

- HTTP Web based GUI
- Backup/Restore Configuration
- Upload Firmware

### Spanning Tree

- IEEE 802.1D STP (Spanning Tree protocol)
- IEEE 802.1w RSTP (Rapid Spanning Tree protocol)

### Quality of Service (QoS)

- Port-based QoS
- 802.1p Class of Service (CoS)
- Bandwidth Control/Rate Limiting per port (Min. Limit: 16Kbps)
- Queue Scheduling: Strict Priority (SP), Weighted Fair Queueing (WFQ)

### VLAN

- Port-based VLAN
- 802.1Q Tagged VLAN
- Up to 32 VLAN groups, ID Range 1-4094
- VLAN port isolation
- Voice VLAN (8 user defined OUIs)

### Multicast

- IGMP Snooping v1/2
- Block unknown multicast source

### Port Mirror

- RX, TX, or Both
- One to one
- Many to one

### Storm Control

- Broadcast (Min. Limit: 16Kbps)
- Multicast (Min. Limit: 16Kbps)
- Loopback Detection

### Special Features

- PoE++ Powered
- Auto-Negotiation

### Power

- IEEE 802.3bt Type 4 (90W), IEEE 802.3bt Type 3 (60W), or IEEE 802.3at (30W), PoE input only (no external power supply)
- IEEE 802.3bt Type 4 PoE PD Class 8
- IEEE 802.3bt Type 3 PoE PD Class 5
- IEEE 802.3at Type 2 PoE PD Class 4
- IEEE 802.3af Type 1 PoE PD Class 0
- Max. consumption: 7.31W (no PoE)

### PoE

- 60W PoE budget with IEEE 802.3bt Type 4 (90W) input power
- 50W PoE budget with IEEE 802.3bt Type 3 (60W) input power
- 21W PoE budget with IEEE 802.3at (30W) input power

### MTBF

- 503,726 hours @ 25°C

### Operating Temperature

- 0° – 40° C (32° – 104° F)

### Operating Humidity

- Max. 90% non-condensing

### Dimensions

- 170 x 105 x 28mm (4.21 x 4.13 x 1.10 in.)

### Weight

- 450g (15.9 oz.)

### Certifications

- CE
- FCC
- LVD

### Warranty

- Lifetime Warranty

### Package Contents

- TPE-B541
- Quick Installation Guide

All references to speed are for comparison purposes only. Product specifications, size, and shape are subject to change without notice, and actual product appearance may differ from that depicted herein.

TRENDnet offers a 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.