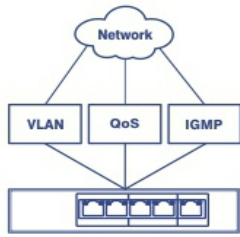# TRENDNET®

5-Port Gigabit PoE+ Powered EdgeSmart Switch with PoE Pass Through
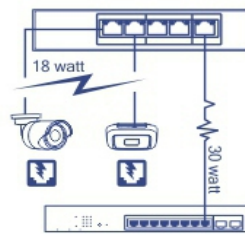
TPE-P521ES (v1.0R)

- 1 x Gigabit PoE+ input port
- 2 x Gigabit PoE output ports
- 2 x Gigabit ports
- 18W PoE power budget
- Easy to use web-based management interface
- Supports static link aggregation, VLAN, QoS, STP, RTSP and IGMP Snooping
- Voice VLAN for VoIP applications
- Bandwidth control per port
- 10Gbps switching capacity
- IEEE 802.1p QoS with queue scheduling support
- Compact fanless design
- Wall mountable metal housing

5-Port Gigabit PoE+ Powered EdgeSmart Switch with PoE Pass Through, model TPE-P521ES, is powered by a PoE+ switch or injector, no AC adapter is required. It features two gigabit non-PoE ports, and two gigabit PoE ports to power devices such as IP cameras, VoIP handsets, and wireless access points. Reducing unnecessary switch complexity, this EdgeSmart switch is equipped with only the most commonly used managed switch features. The simple web-based user interface allows you to easily manage VLANs, QoS, and monitoring.
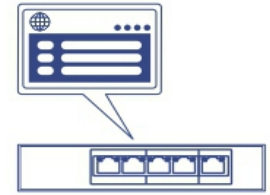
TRENDNET®

Integration Flexibility
Managed features include access control lists, VLAN, IGMP Snooping, and QoS for flexible network integration.
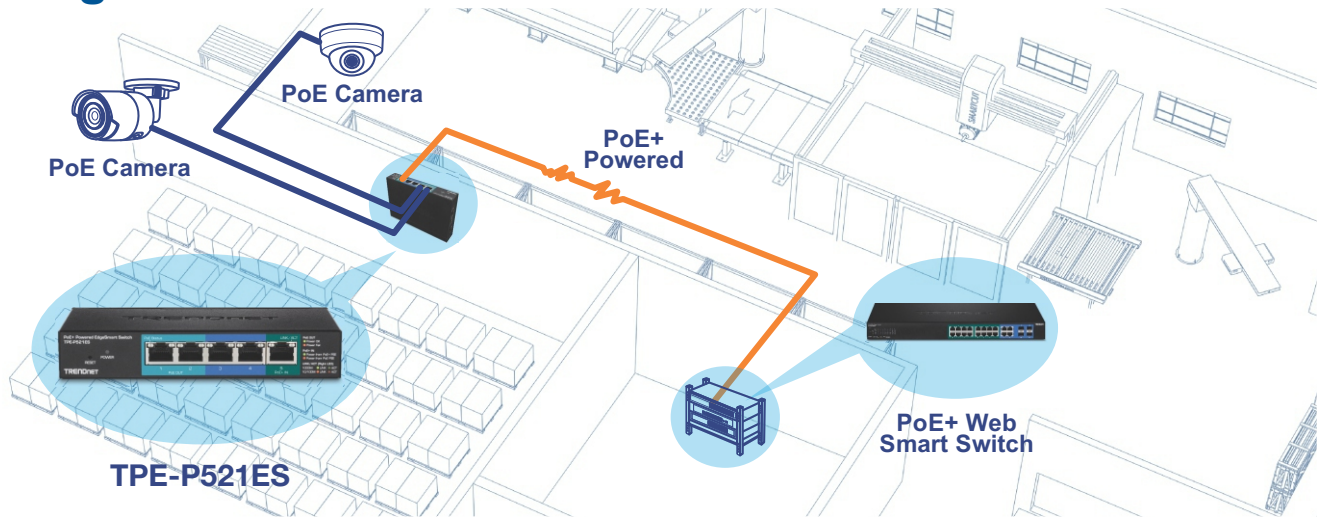
18 watt — **30 watt**

PoE+ Powered
No AC adapter required—this switch is powered by a PoE+ switch or injector, and features two gigabit non-PoE ports, and two gigabit PoE ports to power devices such as IP cameras.

EdgeSmart Management
Provides an easy to use web-based management interface for reduced switch configuration complexity and offers a combination of more commonly used SMB management features for easy deployment.

Networking Solution

PoE Camera

PoE Camera

PoE+ Powered

TPE-P521ES

PoE+ Web Smart Switch

Ports
One gigabit PoE+ input port, two gigabit PoE output ports, and two gigabit ports provides a 10Gbps switching capacity

Network Management
A broad range of network configurations are supported by: static link aggregation, 802.1Q VLAN, bandwidth controls, IGMP, loopback detection, port mirroring, STP, RTSP and 802.1p (QoS).

PoE Power
Two gigabit PoE pass through ports with an 18W total PoE power budget

LED Indicators
LED indicators convey port status

Compact Design
With a compact and lightweight housing design this switch is well-suited for desktop installations. Its fanless design is ideal for quiet environments that require silent operation.

Troubleshooting
Traffic statistics and a convenient cable diagnostic test aid in network troubleshooting.

Housing
Compact wall mountable metal housing

RENDnet

Specifications

Standards	• IEEE 802.1d • IEEE 802.1w • IEEE 802.1p • IEEE 802.1Q • IEEE 802.3 • IEEE 802.3u • IEEE 802.3x • IEEE 802.3ab • IEEE 802.3af • IEEE 802.3at • IEEE 802.3az
Device Interface	• 1 x Gigabit PoE+ PD port • 2 x Gigabit PoE PSE ports • 2 x Gigabit Ports • LED indicators • Reset button
Data Transfer Rate	• Ethernet: 10Mbps (half duplex), 20Mbps (full duplex) • Fast Ethernet: 100Mbps (half duplex), 200Mbps (full duplex) • Gigabit Ethernet: 2000Mbps (full duplex)
Performance	• Switch fabric: 10Gbps • RAM buffer: 512KB • MAC Address Table: 2K entries • Jumbo Frames: 9KB • Forwarding rate: 7.44Mpps (64-byte packet size)
Management	• HTTP Web based GUI • SNMP v1, v2c • Cable diagnostic test • Backup/Restore Configuration • Upload Firmware
Spanning Tree	• IEEE 802.1d STP (spanning tree protocol) • IEEE 802.1w RSTP (rapid spanning tree protocol)
Link Aggregation	• Static link aggregation (up to 2 groups)
Quality of Service (QoS)	• Port-based QoS • 802.1p Class of Service (CoS) • Bandwidth Control/Rate Limiting per port (Min. Limit: 8Kbps) • 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 • Private VLAN • Asymmetric VLAN • Voice VLAN (5 user defined OUIs)

Multicast	• IGMP Snooping v1/2/3 • Block unknown multicast source • Up to 32 multicast groups
Port Mirror	• One to one • Many to one
Storm Control	• Broadcast (Min. Limit: 8Kbps) • Multicast (Min. Limit: 8Kbps) • Loopback Detection
Special Features	• PoE Powered • Enable/disable 802.3az Power Saving • Wall mountable
Power	• IEEE 802.3at (30W) or IEEE 802.3af (15.4W) PoE input only (no external power supply) • IEEE 802.3at Type 2 PoE PD Class 4 • IEEE 802.3af Type 1 PoE PD Class 0 • Max. Consumption 2.4W (without PoE load) • Max. Consumption 20.4W (with max PoE load)
PoE	• 18W PoE Budget with IEEE 802.3at (30W) input power • 8W PoE Budget with IEEE 802.3af (15.4W) input power • PoE Mode A: Pins 1,2 for power and pins 3,6 for power • PD auto classification • Over current/short circuit protection
Fan / Acoustics	• Fanless design
MTBF	• 730,455 hours
Operating Temperature	• 0° – 40° C (32° – 104° F)
Operating Humidity	• Max. 90% non-condensing
Dimensions	• 150 x 97 x 28.6mm (5.9 x 3.81 x 1.12 in.)
Weight	• 370g (13.05 oz.)
Certifications	• CE • FCC
Warranty	• Lifetime Warranty

PACKAGE CONTENTS

• TPE-P521ES
• Quick Installation Guide

If 802.3at PoE+ powered, the device can supply PoE power for up to two PoE class 1 or class 2 PDs or one PoE class 0 or class 3 PD.
If 802.3af PoE powered, the device can supply PoE power for one PoE class 1 or class 2 PD.

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.

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.

Updated: 12/18/2018