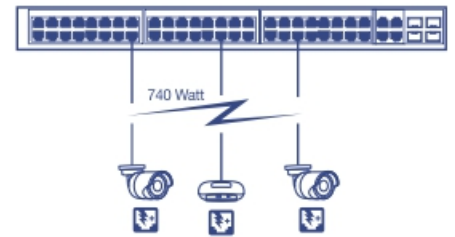
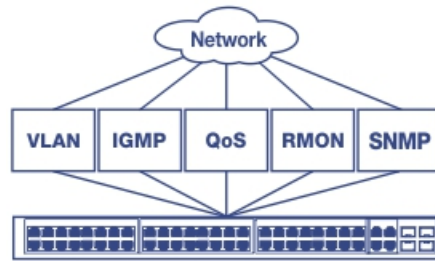
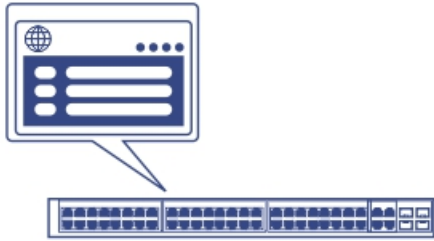


52-Port Gigabit Web Smart PoE+ Switch

TPE-5048WS (v1.0R)

- 48 x Gigabit PoE+ ports
- 4 x Shared Gigabit ports (RJ-45 or SFP)
- 740W PoE power budget
- Easy-to-use web-based management interface
- Supports IPv6, LACP, VLAN, QoS, and IGMP Snooping
- Bandwidth control per port
- Private and Voice VLAN support
- Smart Fan
- 104Gbps switching capacity
- IEEE 802.1p QoS with queue scheduling support

TRENDnet's 52-Port Gigabit Web Smart PoE+ Switch, model TPE-5048WS, delivers advanced management features with a 104Gbps switching capacity. This rack mountable IPv6 ready switch comes with an intuitive web-based interface. Advanced traffic management controls, troubleshooting, and SNMP monitoring make this a powerful solution for SMB networks. The TPE-5048WS provides 48 gigabit PoE+ ports with a total power budget of 740W, and four shared gigabit ports (RJ-45 or SFP). The PoE+ standard supplies up to 30W of power per port for devices such as high power wireless access points, PTZ (Pan Tilt Zoom) Internet cameras, and VoIP telephony systems.



Web Smart Management

Provides an easy-to-use web-based management interface to reduce switch configuration complexity and offers a combination of SMB management features for easy deployment.

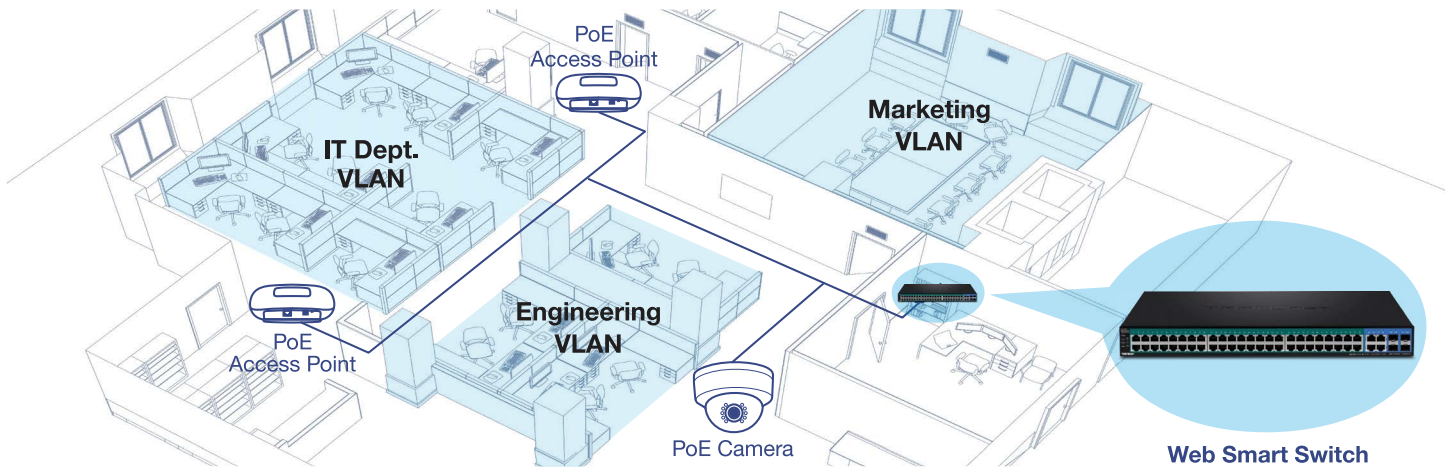
Integration Flexibility

Managed features include access control lists, VLAN, IGMP snooping, QoS, RMON, SNMP trap, and syslog for monitoring and flexible network integration.

PoE Power

A 740W PoE power budget supplies power to PoE/PoE+ devices.

Networking Solution





Hardware Design

Provides 48 gigabit PoE+ ports, 4 shared gigabit ports (RJ-45 or SFP), a 104Gbps switching capacity, a built-in power supply, and rackmount brackets.



PoE Power

Supports up to 30W of PoE+ power per port with a total power budget of 740W.



IPv6 Ready

This switch supports IPv6 configuration and IPv6 neighbor discovery.



Traffic Management

A broad range of network configurations are supported: 802.3ad link aggregation, Asymmetric VLAN, 802.1Q VLAN, Voice VLAN, RSTP, MSTP, Loopback Detection, GVRP, 802.1p Class of Service (CoS), port bandwidth management, and QoS queue scheduling.



Troubleshooting

A convenient cable diagnostic test and traffic statistics aid in network troubleshooting



Access Control

Features such as ACL, SSL, MAC/port filtering, 802.1X, TACACS+, and RADIUS are compatible with layered access controls



Monitoring

RMON, SNMP, SNMP Trap, and Port Mirroring support administrator monitoring solutions

Specifications

Standards

- IEEE 802.1d
- IEEE 802.1p
- IEEE 802.1Q
- IEEE 802.1s
- IEEE 802.1w
- IEEE 802.1X
- IEEE 802.1ab
- IEEE 802.3
- IEEE 802.3u
- IEEE 802.3x
- IEEE 802.3z
- IEEE 802.3ab
- IEEE 802.3ad
- IEEE 802.3af
- IEEE 802.3at
- IEEE 802.3az

Device Interface

- 48 x Gigabit PoE+ ports
- 4 x Shared Gigabit ports (RJ-45/SFP)
- LED indicators

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: 104Gbps
- RAM buffer: 12Mbits
- MAC Address Table: 16K entries
- Jumbo Frames: 10Kbytes
- HOL Blocking Prevention
- Forwarding rate: 77.4Mpps (64-byte packet size)

Management

- HTTP/HTTPS (SSL v2/3 TLS) Web based GUI
- SNMP v1, v2c, v3
- RMON v1
- Static Unicast MAC Address
- Enable/disable 802.3az Power Saving
- LLDP and LLDP-MED
- Virtual Cable Diagnostics Test
- IPv6: IPv6 Neighbor Discovery, IPv6 Static IP, DHCPv6, Auto configuration

MIB

- IP FORWARD TABLE MIB RFC 1354
- RMON MIB RFC 1271
- IPV4 MIB RFC 1213
- IPV6 MIB RFC 2465
- GVRP MIB IEEE 802.1Q-VLAN
- LA MIB IEEE 802.3ad
- LLDP MIB IEEE 802.1AB
- IGMP SNOOPING MIB RFC 2933
- MLD SNOOPING MIB RFC 3019

- PRIVATE VLAN MIB IEEE 802.1Q
- DHCP Snooping MIB RFC 2026
- QOS MIB RFC 4323
- SNMP MIB RFC 3415
- STP MIB RFC 4318
- PNAC MIB IEEE 802.1x
- VLAN MIB IEEE 802.1q
- DNS MIB RFC 1611
- ACL MIB
- BANDWIDTH CTRL MIB
- LBD MIB
- MIRROR MIB
- IPV6 NEIGHBOR MIB
- SNTP MIB
- STORM CTRL MIB
- STATISTICS MIB
- Tool MIB
- VOICE VLAN MIB
- DOS MIB

Spanning Tree

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

Link Aggregation

- Static Link Aggregation
- 802.3ad Dynamic LACP

Quality of Service (QoS)

- 802.1p Class of Service (CoS)
- DSCP (Differentiated Services Code Point)
- Bandwidth Control per port
- Queue Scheduling: Strict Priority, Weighted Round Robin (WRR)

VLAN

- Multiple management VLAN assignment
- Asymmetric VLAN
- 802.1Q Tagged VLAN
- Dynamic GVRP
- Up to 256 VLAN groups, ID Range 1-4094
- Private VLAN (Protected Ports)
- Voice VLAN (10 user defined OUIs)

Multicast

- IGMP Snooping v1, v2, v3 (per VLAN)
- Static Multicast Address
- Up to 256 multicast entries

Port Mirror

- RX, TX, or Both
- One to one

Encryption

- 802.1X Port-Based Network Access Control, RADIUS, TACACS+
- Local Dial In User Authentication

- DHCP Snooping (per VLAN)
- Loopback Detection
- Duplicated Address Detection
- Trusted Host
- Denial of Service (DoS)

ACL IPv4 L2-L4 & IPv6

- MAC Address
- VLAN ID
- Ether Type (IPv4 only)
- IP Protocol 0-255
- TCP/UDP Port 1-65535
- 802.1p
- DSCP (IPv4 only)
- IPv6 Address (IPv6 only)

Compatibility

- Optional Software Utility: Windows® 10, 8.1, 8, 7, Vista, XP, Windows® 2003/2008 Server

Special Features

- PoE+
- IPv6
- 802.3az power saving
- Rack mountable

Power

- Input: 100 - 240V AC, 50/60Hz, internal power supply
- Consumption: 963W (max.)
- Power Budget: 740W

Fan/Acoustics

- Quantity: 5
- Noise Level: 55 dBA (max.)

MTBF

- 338,601 hours

Operating Temperature

- -5 – 50°C (23 - 122°F)

Operating Humidity

- Max. 95% non-condensing

Dimensions

- 440 x 430 x 44mm (17.3 x 17 x 1.74 in.)
- Rack mountable 1U height

Weight

- 6.58kg (14.5 lbs.)

Certifications

- CE
- FCC

Warranty

- Lifetime Warranty*

Package Contents

- TPE-5048WS
- Quick Installation Guide
- CD-ROM (Utility & User's Guide)
- Power cord (1.8m/6 ft.)
- Rack mount kit

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.