

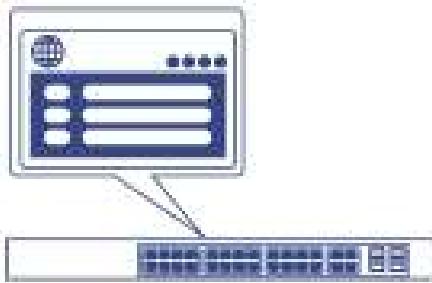


## 28-Port Gigabit Web Smart PoE+ Switch

TPE-5028WS (v1.0R)

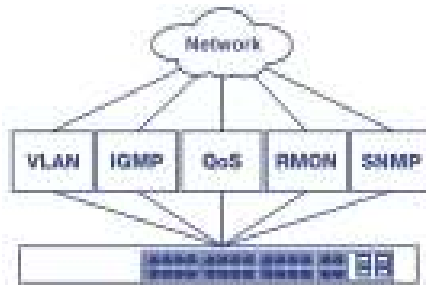
- 24 x Gigabit PoE+ ports
- 4 x Shared Gigabit ports (RJ-45 or SFP)
- 370W PoE power budget
- Easy-to-use web-based management interface
- Supports IPv6, LACP, VLAN, QoS, and IGMP Snooping
- Bandwidth control per port
- Private and Voice VLAN support
- Smart Fan
- 56Gbps switching capacity
- IEEE 802.1p QoS with queue scheduling support

TRENDnet's 28-Port Gigabit Web Smart PoE+ Switch, model TPE-5028WS, delivers advanced management features with a 56Gbps 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-5028WS provides 24 gigabit PoE+ ports with a total power budget of 370W, 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.



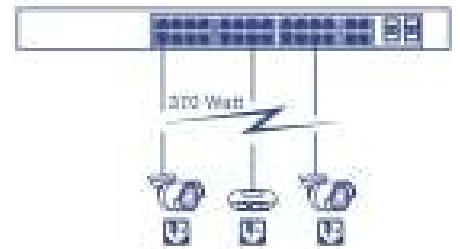
## Web Smart Management

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

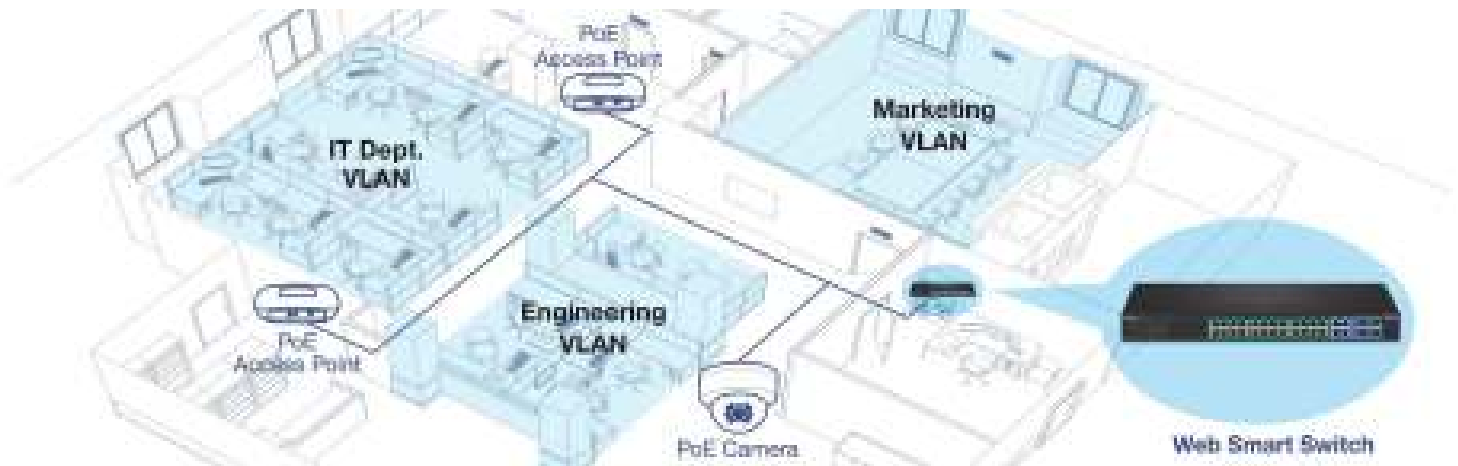
Managed features include access control lists, VLAN, IGMP snooping, QoS, RMON, SNMP trap, and syslog for monitoring and flexible network integration.



## PoE Power

A 370W PoE power budget supplies power to PoE/PoE+ devices.

## Networking Solution





## Hardware Design

Provides 24 gigabit PoE+ ports, 4 shared gigabit ports (RJ-45 or SFP), a 56Gbps 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 370W.



## 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

- 24 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: 56Gbps
- RAM buffer: 4.1Mbits
- MAC Address Table: 8K entries
- Jumbo Frames: 10Kbytes
- HOL Blocking Prevention
- Forwarding rate: 41.7Mpps (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: 446W (max.)
- Power Budget: 370W

### Fan/Acoustics

- Quantity: 2
- Noise Level: 52 dBA (max.)

### MTBF

- 277,604 hours

### Operating Temperature

- -5 – 50°C (23 - 122°F)

### Operating Humidity

- Max. 95% non-condensing

### Dimensions

- 440 x 250 x 44mm (17.3 x 9.8 x 1.74 in.)
- Rack mountable 1U height

### Weight

- 3.92kg (8.64 lbs.)

### Certifications

- CE
- FCC

### Warranty

- Lifetime Warranty\*

### Package Contents

- TPE-5028WS
- 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.