



## 10-Port Gigabit Web Smart PoE+ Switch

TPE-082WS (v1.5R)

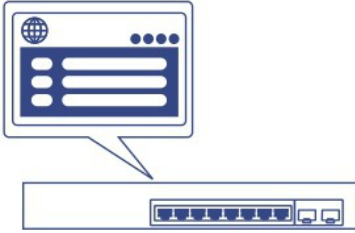
- 8 x Gigabit PoE+ ports
- 2 x SFP slots
- 75W PoE power budget
- Easy-to-use web-based management interface
- PoE alive check automatically attempts to recover an unresponsive PoE device connected
- Remote cloud management with TRENDnet Hive (Additional fee applies)
- Supports IPv6, LACP, VLAN, QoS, and IGMP Snooping
- Bandwidth control per port
- Private, Multicast, and Voice VLAN support
- 20Gbps switching capacity
- IEEE 802.1p QoS with queue scheduling support
- Fanless rack mountable metal housing

TRENDnet's Gigabit Web Smart PoE+ Switch series offers advanced L2+ features with enhanced traffic management controls to meet the evolving demands of SMB networks. This rack mountable IPv6-ready managed switch comes with an intuitive web-based interface. Advanced managed switch features include LACP to increase bandwidth between switches by grouping ports together, VLANs for segmenting and isolating virtual LAN groups, QoS for traffic prioritization, port bandwidth controls, and SNMP monitoring, making this a powerful solution for any SMB network. Improve voice performance by isolating and prioritizing VoIP traffic from normal data traffic with an easy-to-use voice VLAN feature.

Free up router resources by offloading routing processes to this managed switch by using the L2+ IPv4/IPv6 static routing feature to efficiently route traffic at the switch level. The dynamic ARP inspection feature helps protect connected devices from man-in-the-middle attacks by discarding malicious and invalid ARP packets. Take advantage of the available multicast and IGMP/MLD snooping features to optimize IP surveillance system performance, and minimize network traffic. TRENDnet's web smart managed switches also feature SFP slots to support long-distance fiber networking applications.

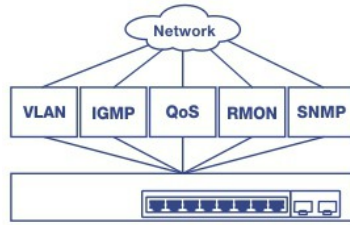
Installers and integrators can save on equipment costs and reduce installation time with TRENDnet's Web Smart PoE+ Managed Switches by delivering up to 30W per port of PoE power and data over existing Ethernet cables. With PoE technology, users only need one set of cables to deliver both data and power. With this PoE+ managed switch, network PoE devices, such as high-power wireless access points, PTZ and other advanced IP cameras, VoIP phone systems, IPTV decoders, access controls, and more.

Easily manage and configure TRENDnet's Web Smart PoE+ Managed Switch Series remotely by updating switches to the latest firmware for access to TRENDnet Hive. TRENDnet Hive is a network cloud manager that reduces management time and cost. No additional hardware, server, or personal cloud is required on these cloud managed switches with TRENDnet's reliable cloud service.



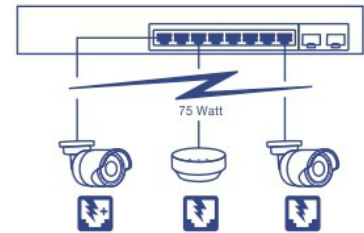
### Web Smart Management

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



### Integration Flexibility

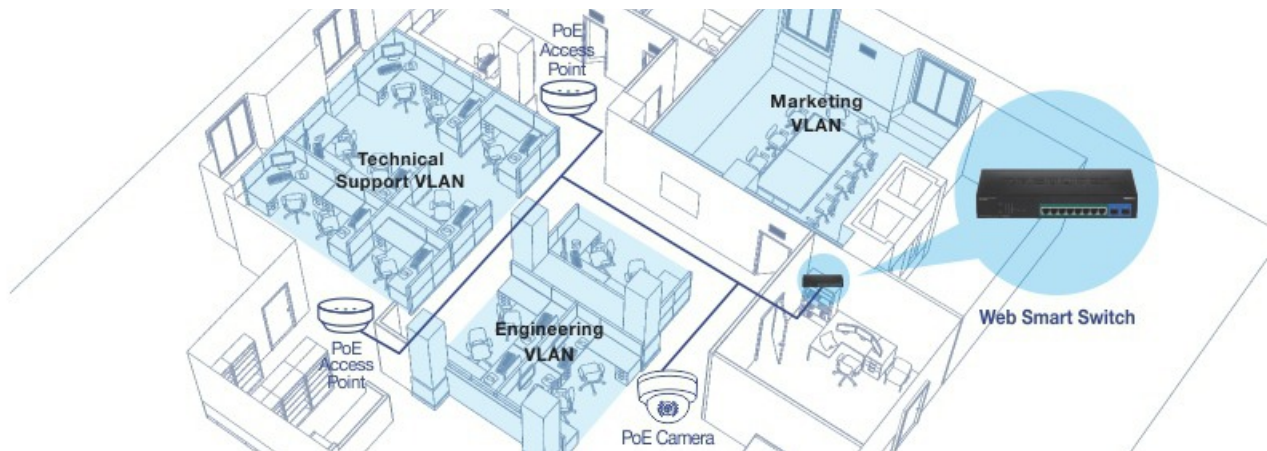
Managed features include access control lists, VLAN, IGMP snooping, QoS, RMON, SNMP trap, and syslog for monitoring and flexible network integration.



### PoE Power

A 75W PoE power budget supplies up to eight Power over Ethernet devices.

## NETWORKING SOLUTION



LED indicators

8 x Gigabit PoE+ ports

2 x SFP slots

## FEATURES



### Hardware Design

Provides eight gigabit PoE+ ports, two SFP slots, a 20Gbps switching capacity, a built-in power supply, and rackmount brackets.



### PoE Power

Supplies up to 30W of PoE+ power per port with a 75W power budget



### Troubleshooting

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



### Hive Enabled

Remotely manage, configure, and diagnose this web smart switch via TRENDnet's cloud service (Additional fee applies)



### Monitoring

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



### Traffic Management

A broad range of network configurations are supported by: 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.



### Access Control

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



### IPv6 Ready

This switch supports IPv6 configuration and IPv6 neighbor discovery.

## 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

- 8 x Gigabit PoE+ ports
- 2 x SFP slots
- LED indicators

### Data Transfer Rate

- Ethernet: 10 Mbps (half duplex), 20 Mbps (full duplex)
- Fast Ethernet: 100 Mbps (half duplex), 200 Mbps (full duplex)
- Gigabit Ethernet: 2000 Mbps (full duplex)

### Performance

- Switch fabric: 20 Gbps
- RAM buffer: 4.1 Mbits
- MAC Address Table: 8K entries
- Jumbo Frames: 10 Kbytes
- HOL Blocking Prevention
- Forwarding rate: 14.9 Mpps (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

### Hive Cloud Management

- Configure, monitor, and manage through the TRENDnet Hive Cloud Management Portal remotely via PC or Mac web browser
- Multi-device management
- Provisioning through scheduled batch firmware or configuration updates for multiple switches
- Event/hardware network monitoring (CPU/memory utilization)
- Enable & disable PoE, set PD (powered device) alive check, configure PoE scheduling, and monitor PoE budget utilization (for PoE switches only)
- Configure features such as IP address settings, VLANs, spanning tree, loopback detection, IGMP snooping, link aggregation, and bandwidth control through cloud management

### 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+
- Fanless Design
- IPv6
- 802.3az power saving
- Rack mountable

## Power

- Input: 100 – 240V AC, 50/60Hz, DC 54V/1.67A external power supply
- Max. consumption: 82W

## PoE

- Power Budget: 75W
- 802.3at: Up to 30W per port
- PoE Mode A: Pins 1, 2, 3, and 6 for power
- PoE auto/manual classification
- PoE port priority/power scheduling
- PD alive check

## MTBF

- 862,966 hours

## Operating Temperature

- -5 – 50°C (23 - 122°F)

## Operating Humidity

- Max. 95% non-condensing

## Dimensions

- 280 x 125.8 x 44 mm (11 x 5 x 1.74 in.)
- Rack mountable 1U height

## Weight

- 0.92 kg (2 lbs.)

## Certifications

- CE
- FCC

## Warranty

- 3 year

## Package Contents

- TPE-082WS
- Quick Installation Guide
- CD-ROM (Utility & User's Guide)
- Power adapter (54V DC, 1.67A)
- Rack mount kit