



## 10-Port Multi-Gig Web Smart PoE+ Switch

TPE-3102WS (v1.0R)

- 8 x 2.5GBASE-T PoE+ ports
- 2 x 10 SFP+ slots
- 240W PoE power budget
- Backwards compatible with 100/1000BASE-T devices
- Easy-to-use web-based management interface
- PoE alive check automatically attempts to recover an unresponsive PoE device connected
- Supports IPv6, LACP, VLAN, QoS, and IGMP Snooping
- Bandwidth control per port
- Private, Multicast, and Voice VLAN support
- 1U 19" rack mountable
- 80Gbps switching capacity
- IEEE 802.3bz (2.5G) compliant
- IEEE 802.3ae (SFP+) compliant
- NDAA / TAA compliant (U.S. and Canada only)

TRENDnet's Multi-Gigabit Web Smart PoE+ Switch series offers advanced L2+ features with enhanced traffic management controls to meet the evolving demands of SMB networks. Each of these rack-mountable IPv6-ready managed switches come 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 these 2.5G managed PoE+ switches with 10G SFP+ slots powerful solutions 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.

These multi-gigabit managed PoE+ switches come equipped with 2.5GBASE-T RJ-45 ports that provide higher gigabit speeds capable of up to 2.5Gbps over your existing Cat5e or better cabling. Each multi-gig managed PoE+ switch also offers two dedicated 10G SFP+ slots for high-speed network connections, providing a cost-effective solution in adding 10G link capability to an SMB network. The switch design lowers energy consumption and eliminates distracting operating noise. TRENDnet's reliable 2.5G managed PoE+ switches with 10G SFP+ slots offer cost-effective solutions to increase your network's throughput.

Installers and integrators can save on equipment costs and reduce installation time with TRENDnet's Multi-Gig Web Smart Managed PoE+ 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 these 2.5G managed PoE+ switches, 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.



### 10G SFP+ Slots

Offers two ultra-fast 10G SFP+ slots for high-speed network connections, providing a cost-effective solution in adding 10G link capability.



### Web Smart Management

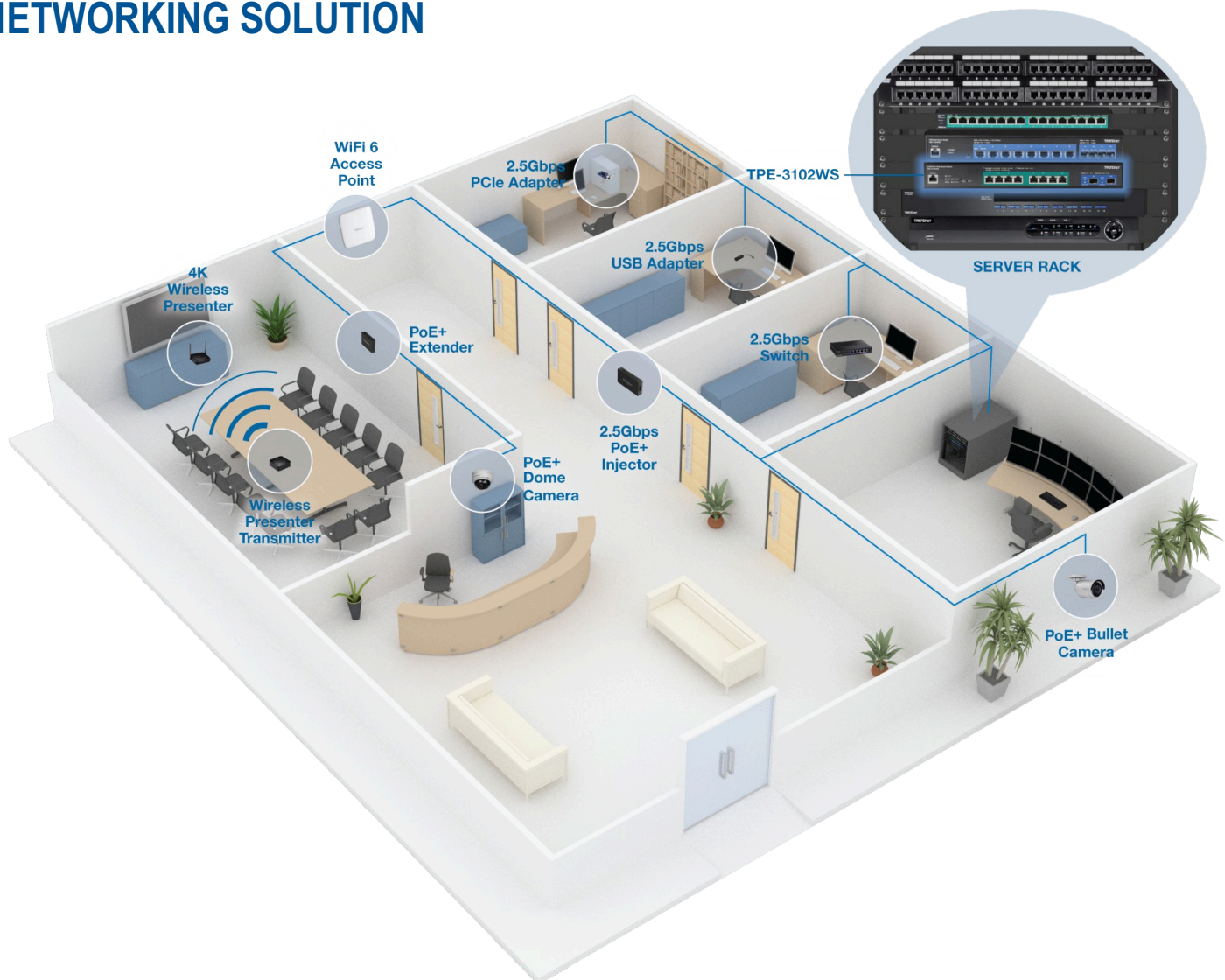
Provides an easy-to-use web-based GUI management for reduced switch configuration complexity, and offers a combination of SMB management features for easy deployment.



### 2.5G Ports

Equipped with eight high-speed 2.5GBASE-T RJ-45 ports that provide multi-gigabit speeds capable of up to 2.5Gbps over existing Cat5e or better cabling.


## NETWORKING SOLUTION





## FEATURES



- 1**  
**2**  
**3**


**Easy Installation**  
No configuration needed, simply connect network devices to the 2.5G managed PoE+ switch



 **2.5G Ports**  
Equipped with eight 2.5GBASE-T PoE+ RJ-45 ports that provide higher gigabit speeds capable of up to 2.5Gbps over existing Cat5e or better cabling


 **10G SFP+ Slots**  
Offers 10G SFP+ slots for high-speed network connections providing a cost-effective solution in adding 10G link capability
-  **PoE Power**  
Supplies up to 30W of PoE+ power per port with a 240W power budget


 **IPv6 Ready**  
This 2.5G managed PoE+ switch supports IPv6 configuration and IPv6 neighbor discovery


 **LED Indicators**  
LED indicators on this 2.5G managed PoE+ switch convey port status
-  **Troubleshooting**  
The 2.5G managed PoE+ switch's convenient cable diagnostic test and traffic statistics aid in network troubleshooting

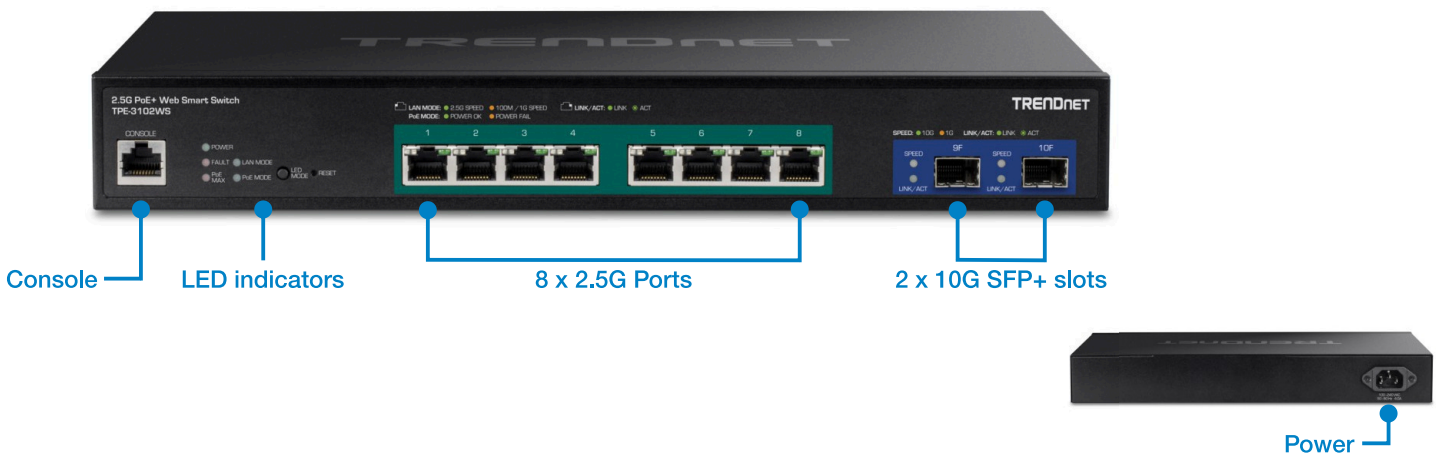
 **Access Control**  
Features such as ACL, SSL, MAC/port filtering, 802.1X, TACACS+, and RADIUS are compatible with layered access controls

 **Jumbo Frame**  
Sends larger packets, or Jumbo Frames (up to 10KB) for increased performance
-  **Monitoring**  
RMON, SNMP, SNMP Trap, and Port Mirroring support administrator monitoring solutions

 **Housing Design**  
Sturdy metal housing

 **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
-  **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

 **Integration Flexibility**  
Managed features on the 2.5G managed PoE+ switch include access control lists, VLAN, IGMP snooping, QoS, RMON, SNMP trap, and syslog for monitoring and flexible network integration



## SPECIFICATIONS

### Standards

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

### Device Interface

- 8 x 2.5G Ports
- 2 x 10G SFP+ slots
- LED indicators

### Data Transfer Rate

- Gigabit Ethernet: 2000Mbps (full duplex)
- 2.5G Ethernet: 5000Mbps (full duplex)
- SFP: 2000Mbps (full duplex)
- SFP+: 20Gbps (full duplex)

### Performance

- Switch fabric: 80Gbps
- RAM buffer: 1.5MB
- MAC Address Table: 16K entries
- Jumbo Frames: 10KB
- HOL Blocking Prevention
- Forwarding rate: 59.52Mpps (64-byte packet size)

### Management

- CLI (Telnet / SSHv2) for basic administration
- 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
- Dual image and configuration

### MIB

- RMON MIB RFC 1271
- LLDP MIB IEEE 802.1ab
- RFC 1213 MIB II
- RFC 1643 Ethernet intf MIB
- RFC 1493 bridge 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

- 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
- MLD Snooping v1, v2
- IGMP fast leave
- Up to 256 multicast entries

### Port Mirror

- RX, TX, or Both
- Many to one

### Access Control

- 802.1X Port-Based Network Access Control, RADIUS, TACACS+
- Local Dial-In User Authentication
- DHCP Snooping
- Loopback Detection
- Trusted Host
- Denial of Service (DoS)
- IP MAC port binding
- Block unknown multicast

### ACL IPv4 L2-L4 & IPv6

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

### Layer 3 Features

- IPv4 / IPv6 static routing
- IP interfaces: Up to 6
- Routing table entries: Up to 32 (IPv4 / IPv6)
- ARP table (up to 128 entries)
- Inter-VLAN routing

### Power

- Input: 100 – 240V AC, 50/60Hz, internal power supply
- Max. consumption: 60W (No PD connected)

### PoE

- PoE budget: 240W
- 802.3at: Up to 30W per port
- PoE Mode A: Pins 1, 2 for power and pins 3.6 for power
- PD auto classification
- Over current/short circuit protection

### Fan/Acoustics

- Quantity: 1
- Smart Fans
- Noise Level: 48.5 dBA (max.)

### MTBF

- 342,321 hours

### Operating Temperature

- -0° – 40° C (32° – 104° F)

## Operating Humidity

- Max. 95% non-condensing

## Dimensions

- 300 x 230 x 44mm (13 x 9.06 x 1.73 in.)

## Weight

- 2.265kg (1.46 lbs.)

## Certifications

- CE
- FCC
- UL

## Warranty

- 3 year

## Package Contents

- TPE-3102WS
- Quick Installation Guide
- Power Cord (1.5m / 5 ft.)
- Rackmount Brackets

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.