



## 10-Port Gigabit Web Smart PoE+ Switch TPE-1020WS

- 8 x PoE+ Gigabit ports
- 2 x Gigabit Ethernet ports and 2 x shared SFP slots
- Up to 30 Watts per port with a 75 Watts total power budget
- 20 Gbps switching capacity
- Rack mountable

TRENDnet's 10-Port Gigabit Web Smart PoE+ Switch, model TPE-1020WS, delivers a 20 Gbps switching capacity with eight PoE+ Gigabit ports and two Gigabit Ethernet uplink ports shared with two SFP slots. This IPv6 ready switch offers advanced traffic management, troubleshooting, security, energy saving GREENnet, and monitoring features at a reduced cost.



## Hardware Design

Fanless rack mountable housing features eight Gigabit PoE+ ports (automatically supplies PoE+ (30 Watts) and PoE (15 Watts)) and two Gigabit Ethernet uplink ports shared with two SFP slots.



## IPv6 Ready

This switch supports IPv6 configuration and neighbor IPv6 network support.



## Traffic Management

A broad range of network configurations are support by: 802.3ad link aggregation, Asymmetric VLAN, 802.1Q VLAN, Voice VLAN, GVRP, 802.1p Class of Service (CoS), and QoS queue scheduling.



## Troubleshooting

Real time traffic comparison charts, error group charts, and a convenient cable diagnostic test aides in rapid troubleshooting.



## Security

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



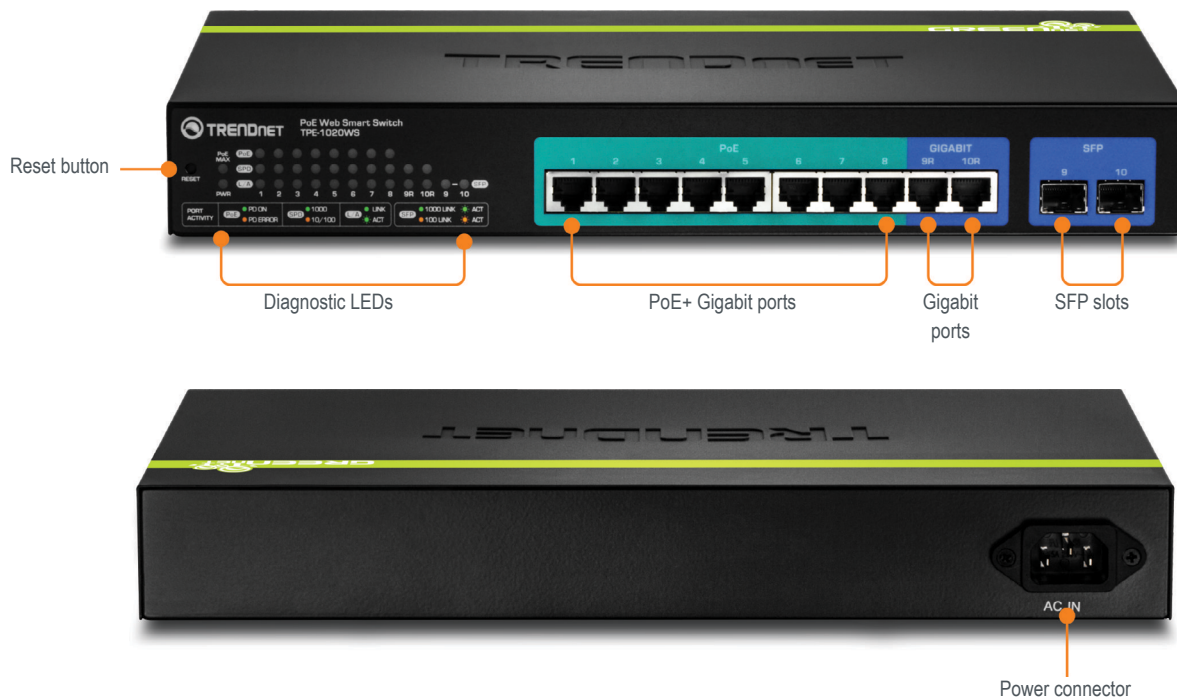
## Monitoring

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



## Energy Savings

Up to 70% energy saving GREENnet technology



## 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 (ports 1-8)
- 2 x Gigabit Ethernet ports (ports 9-10)
- 2 x Shared SFP slots (shared with ports 9-10)
- 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: 8 Mbits
- MAC Address Table: 16K entries
- Jumbo Frames: 10 Kbytes
- HOL Blocking Prevention
- Forwarding rates: 14.88 Mpps

### 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
- Virtual Cable Test
- IPv6: IPv6 Neighbor Discovery, IPv6 Static IP, DHCPv6, Auto configuration

### MIB

- MIB II RFC 1213
- Bridge MIB RFC 1493
- Bridge MIB Extension RFC 2674
- SNMPv2 MIB RFC 1907
- Ethernet Interface MIB RFC 1643

- Ethernet –like MIB RFC 2863
- Interface Group MIB RFC2233
- MIB Traps Convention RFC 1215
- RMON MIB RFC 1757, RFC 2819
- 802.1p MIB RFC 2674
- RADIUS Client Authentication MIB RFC 2618
- LLDP-MIB IEEE 802.1ab
- Ping MIB RFC 2925, RFC 4560

### 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
- Many to one

### Security

- 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® 8.1 (32/64-bit) 8 (32/64-bit) 7 (32/64-bit), Vista (32/64-bit), XP (32/64-bit), Windows® 2003/2008 Server (32/64-bit)

### Special Features

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

### Power

- Input: 100 - 240 V AC, 50/60 Hz, internal power supply
- Consumption: 92.3 Watts (Max)
- PoE budget: 75 Watts

### Fan/Acoustics

- Quantity: 0
- Noise Level: 0 dB(A) (max.)

### MTBF

- 545,798 hours

### Operating Temperature

- 0 – 45 °C (32 - 113 °F)

### Operating Humidity

- Max 90% non-condensing

### Dimensions

- 330 x 183 x 44.45 mm (13 x 7.2 x 1.75 in.)
- Rack mountable 1U height

### Weight

- 1.9 kg (4.1 lbs.)

### Certifications

- CE
- FCC

### Warranty

- 3-year limited

### Package Contents

- TPE-1020WS
- Quick Installation Guide
- CD-ROM (Utility & User's Guide)
- Power cord (1.8 m/6 ft.)
- Rack mount kit

