10-Port Gigabit Web Smart PoE++ Switch

TPE-1020SB (v1.xR)

- 8 x Gigabit 95W PoE++ ports
- 2 x Gigabit SFP slots
- 180W PoE power budget
- Easy-to-use web-based management interface
- PoE alive check automatically attempts to recover an unresponsive PoE device
- Supports IPv6, LACP, VLAN, QoS, and IGMP Snooping
- Bandwidth control per port
- Private, Multicast, and Voice VLAN support
- 1U 19" rack mountable
- 20Gbps switching capacity
- IEEE 802.3bt PoE++ compliant
- Lifetime Warranty

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 PoE++ 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 managed PoE++ switch 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.

Installers and integrators can save on equipment costs and reduce installation time with TRENDnet's Gigabit Web Smart Managed PoE++ Switch by delivering up to 95W of PoE power and data over existing Ethernet cables. With PoE technology, users only need one cable to deliver both data and power. This PoE++ switch is ideal for networking PoE devices, such as high-power wireless access points, PoE lighting, digital signage, PTZ and other advanced IP cameras, VoIP phone systems, IPTV decoders, access controls, and more.

PoE Power

This managed PoE++ switch comes with eight PoE++ ports that can supply up to 180W of PoE power.
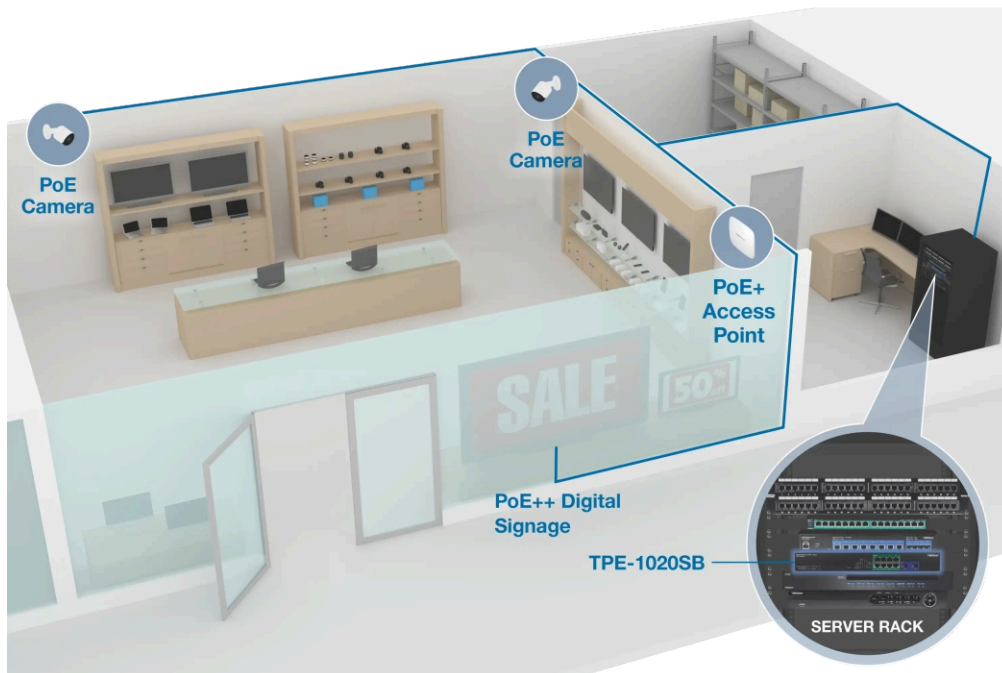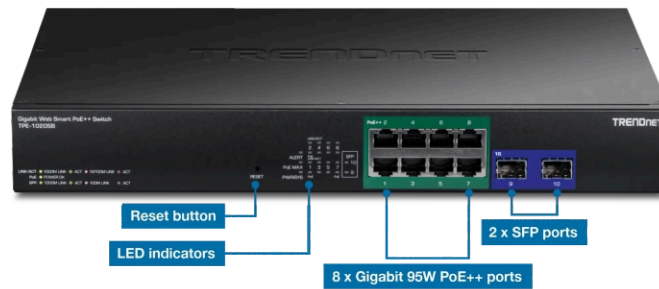

PoE Device Alive Check

PD alive check is an automated PoE selfhealing switch feature. If a PoE device becomes unresponsive, the switch will auto-reboot the affected PoE port in an attempt to recover the device.

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.

NETWORKING SOLUTION

Reset button

LED indicators

8 x Gigabit 95W PoE++ ports

2 x SFP ports

PoE Camera

PoE Camera

PoE+ Access Point

PoE++ Digital Signage

TPE-1020SB

SERVER RACK

FEATURES

PoE++ Power
Supplies up to 95W of PoE+ power per port with a 180W power budget

Fiber SFP
The PoE++ switch with SFP ports supports up to two high-speed fiber connections for long-distance network applications

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

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

Troubleshooting
The 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

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

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

Housing Design
Sturdy metal housing

19" Rackmount Design
Rack mountable housing with mounting kit included

Jumbo Frame
Sends larger packets, or Jumbo Frames (up to 9KB), for increased performance

LED Indicators
LED indicators on this PoE++ switch convey port status

Network Monitoring
Managed features on the managed PoE++ switch include RMON, SNMP trap, and syslog for monitoring and flexible network integration

TRENDnet®

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
- IEEE 802.3bt

Device Interface
- 8 x Gigabit 95W PoE++ ports
- 2 x SFP ports
- LED indicators
- Reset button

Data Transfer Rate
- Gigabit Ethernet: 2000Mbps (full duplex)
- SFP: 2000Mbps (full duplex)

Performance
- Switch fabric: 20Gbps
- RAM buffer: 512KB
- MAC Address Table: 8K entries
- Jumbo Frames: 9KB
- HOL Blocking Prevention
- Forwarding rate: 14.88Mpps (64-byte packet size)

Management
- CLI (Telnet / SSHv2) for basic administration
- HTTP/HTTPS (SSL v2/3 TLS version 1.2) 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 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)
- TCP/UDP Port 1-65535
- 802.1p
- DSCP (IPv4 only)
- 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 15
- 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: 5.8W (without PD) / 185.8W (with PD)

PoE
- Power Budget: 180W
- 802.3bt: up to 95W
- PoE++: pin 1, 2, 4, 5 + and pin 3, 6, 7, 8 -
- PoE manual classification

Fan/Acoustics
- Quantity: 1
- Smart Fan
- Noise Level: 55dB(A) (max.)

MTBF
- 243,000 @ 25° C

Operating Temperature
- 0° – 40° C (32° – 104° F)

Operating Humidity
- Max. 90% non-condensing

Dimensions
- 330 x 230 x 44mm (12.80 x 9.06 x 1.74 in.)
- Rack mountable 1U height

Weight
- 2.38kg (5.25 lbs.)

Certifications
- CE
- FCC
- LVD
- ETL

Package Contents
- TPE-1020SB
- Quick Installation Guide
- Power cord (1.5m/4.9 ft.)
- Rackmount kit

Warranty
- Lifetime Warranty

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.

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.