



## 12-Port 10G PoE++ Web Smart Switch (720W)

TPE-7124SBF (v1.xR)

- 8 x 10G PoE++ ports
- 4 x 10G SFP+ ports
- 720W PoE power budget
- Fast PoE minimizes wait time for powering up PoE devices
- Perpetual PoE eliminates PoE down time during switch reboot
- PoE alive check automatically attempts to recover an unresponsive, connected PoE device
- Supports 100M/1G/2.5G/10GBASE-T link speeds

- Easy-to-use web-based management interface
- Supports IPv6, LACP, VLAN, QoS, IGMP/MLD Snooping
- IPv4/IPv6 Static Routing support
- Bandwidth control per port
- Voice VLAN support
- 1U 19" rack mountable metal housing
- Lifetime Warranty
- NDAA / TAA compliant (U.S. and Canada only)

TRENDnet's 12-Port 10G PoE++ Web Smart Switch (720W), model TPE-7124SBF, offers advanced traffic management controls to meet the evolving demands of SMB networks. This 10G managed PoE++ switch comes with an intuitive web-based interface. Management features include LACP to increase bandwidth between switches, 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 10G managed PoE++ 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. Take advantage of the available multicast and IGMP/MLD snooping features to optimize IP surveillance system performance, and minimize network traffic.

This 12-Port 10G managed PoE++ switch also features eight 10GBASE-T PoE++ ports, and four 10G fiber SFP+ ports for long-distance, high-speed network connections, providing a cost-effective solution in adding 10G link capability to an SMB network. Installers and integrators can save on equipment costs and reduce installation time with TRENDnet's 10G PoE++ switch by delivering up to 90W per port of PoE power and data over existing Ethernet cables. Easily network PoE devices with a 720W PoE budget to devices, such as high-power wireless access points, LED lighting, digital signage, IPTV decoders, access controls, cameras, and more with this high-power 10G managed PoE++ switch.



### High-Speed 10GBASE-T and 10G SFP+

Offers eight 10GBASE-T Ethernet ports, and four 10G SFP+ ports for high-speed network connections providing a costeffective solution in adding 10G link capability to an SMB network.



### Web Smart Management

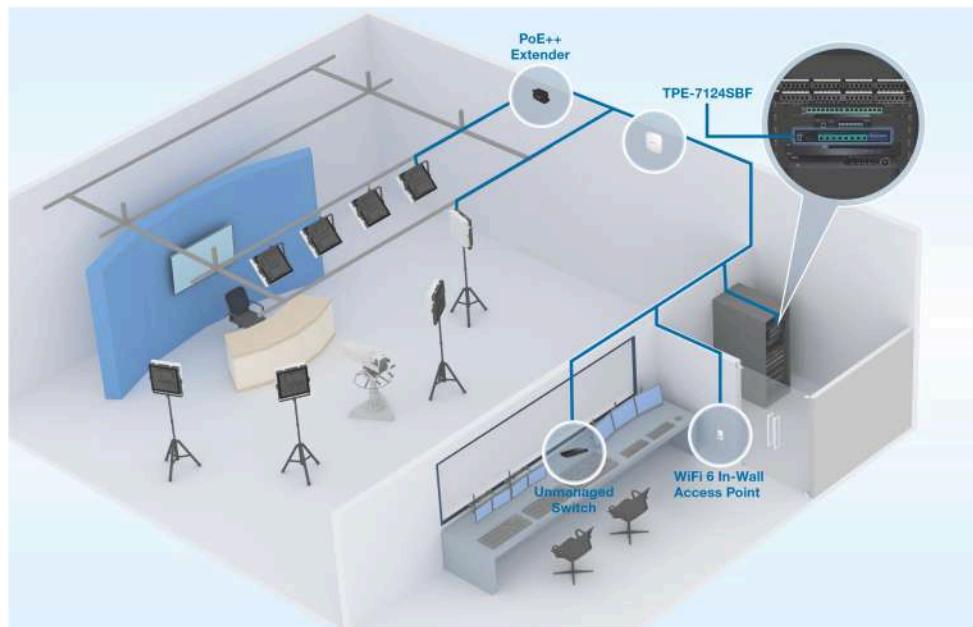
Provides an easy-to-use web-based management GUI for reduced switch configuration complexity, and offers a combination of SMB management features for easy deployment.



### PoE++

A 720W total PoE power budget on this 10G PoE++ switch supplies up to eight PoE++ devices with up to 90W per port.

## NETWORKING SOLUTION



## FEATURES

**10G**

Provides eight 10G ports, four 10G SFP+ ports, and a 240Gbps switching capacity

**PoE++**

Eight PoE++ ports provide up to 90W of power per port

**Full Power**

Provides a total 720W PoE power budget

**Fast PoE**

With Fast PoE, the PoE++ switch provides power to a connected PoE device within a few seconds of the switch receiving power—no need to wait for the switch to fully boot up

**Perpetual PoE**

Continuously send power to your PoE PD devices during a switch reboot or a firmware update

**IPv6 Ready**

This 10Gb managed switch supports IPv6 configuration and IPv6 neighbor discovery

**Traffic Management**

A broad range of network configurations on the 10G managed switch 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**

A convenient cable diagnostic test and traffic statistics aid in network troubleshooting the 10G managed PoE++ switch

**Access Control**

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

**Monitoring**

The 10G managed PoE++ switch features RMON, SNMP, SNMP Trap, and Port Mirroring, supporting administrator monitoring solutions

**Smart Fans**

Smart fans save energy by auto adjusting the fan speed and use based on cooling needs

**Rackmount Design**

This switch is well-suited for a 1U rack installations with the included rackmount brackets

**Jumbo Frame**

Send larger packets, or Jumbo Frames (up to 10KB), for increased performance

**LED Indicators**

LED indicators on the 10G managed PoE++ switch convey port status

**Internal Power Supply**

Built-in internal power supply with included power cord

# 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 802.3ae
- IEEE 802.3an
- IEEE 802.3af
- IEEE 802.3at
- IEEE 802.3az
- IEEE 802.3bz
- IEEE 802.3bt

## Device Interface

- 8 x 10G PoE++ ports (100Mbps/1Gbps/2.5Gbps/10Gbps)
- 4 x 10G SFP+ ports (1Gbps/10Gbps)
- LED indicators
- Reset button

## Data Transfer Rate

- Fast Ethernet: 100Mbps (half duplex), 200Mbps (full duplex)
- Gigabit Ethernet: 2Gbps (full duplex)
- 2.5G Ethernet: 5Gbps (full duplex)
- 10G Ethernet: 20Gbps (full duplex)
- SFP: 2Gbps (full duplex)
- SFP+: 20Gbps (full duplex)

## Performance

- Switch fabric: 240Gbps
- RAM buffer: 2MB
- MAC Address Table: 32K entries
- Jumbo Frames: 10KB
- HOL Blocking Prevention
- Forwarding rate: 178.56Mpps (64-byte packet size)

## Management

- CLI (Telnet / SSHv2) limited administration only
- 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-like interface 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
- 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: 57.4W (No PD connected)

## PoE

- PoE budget: 720W
- 802.3bt: Up to 90W per port
- PoE++ Pins 3, 4, 5, 6 for power+ and pins 1, 2, 7, 8 for power-
- PoE/PoE+ pins 3, 6 for power + and pins 1, 2 for power- (mode A)
- PD auto classification
- Over current/short circuit protection
- PD alive check
- Fast PoE
- Perpetual PoE

## Fan/Acoustics

- Quantity: 3
- Smart fans
- Max. noise level 51.1 dBA

## MTBF

- 161,000 hours @ 25° C

## Operating Temperature

- 0° – 50° C (32° – 122° F)

**Operating Humidity**

- Max. 90% non-condensing

**Dimensions**

- 330 x 228 x 44mm (12.99 x 8.98 x 1.73 in.)

**Weight**

- 2.875kg (6.33 lbs.)

**Certifications**

- CE
- FCC
- UL

**Warranty**

- Lifetime Warranty

**Package Contents**

- TPE-7124SBF
- Power cord (1.5m / 5 ft.)
- Console cable (1m / 3.28 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.

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.