# TRENDNET®

10-Port 2.5GBASE-T Web Smart PoE+ Switch with 2 x 10G SFP+ Slots

TPE-30102WS (v1.0R)

- 8 x 2.5GBASE-T PoE+ ports with 2 x 10G SFP+ Slots
- 2.5GBASE-T supports up to 2.5Gbps connection speeds
- Compatible with existing Cat5e or better cabling
- Easy to use web-based management interface
- Supports up to 32 IPv4/IPv6 static routes
- Supports LACP, VLAN, and IGMP Snooping
- IEEE 802.1p QoS with queue scheduling support
- Per port MAC restriction and dynamic ARP inspection
- Bandwidth control per port
- 80Gbps switching capacity
- 1U rack mountable (brackets included)

TRENDnet's 10-Port 2.5G Web Smart PoE+ Switch with eight 2.5GBASE-T PoE+ ports and two 10G SFP+ slots, model TPE-30102WS, delivers advanced management features with an 80Gbps switching capacity. The TPE-30102WS is equipped with 2.5GBASE-T PoE+ ports that provide higher gigabit speeds capable of up to 2.5Gbps over existing Cat5e or better cabling. This switch provides eight PoE+ connections with a total power budget of 240W, and supplies up to 30W of power per port for devices such as wireless access points, PTZ IP cameras, and VoIP telephony systems. This rack mountable IPv6 ready switch comes with an intuitive web-based interface. Advanced traffic management controls include IP routing, VLAN, QoS, access controls, link aggregation, troubleshooting, and SNMP monitoring, making this a powerful solution for SMB networks.

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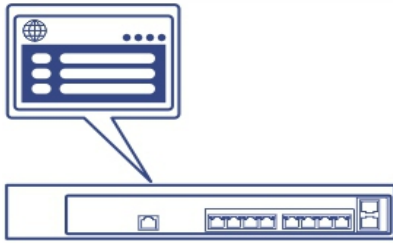
Web Smart Management
Provides an easy to use web-based GUI management interface for advanced traffic management controls, IP routing, VLAN, QoS, access controls, link aggregation, troubleshooting, SNMP monitoring, per port MAC restriction, and dynamic ARP inspection.
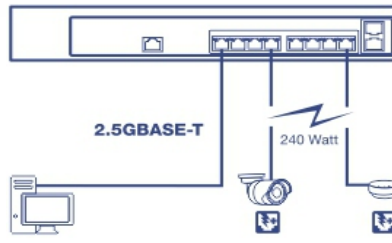
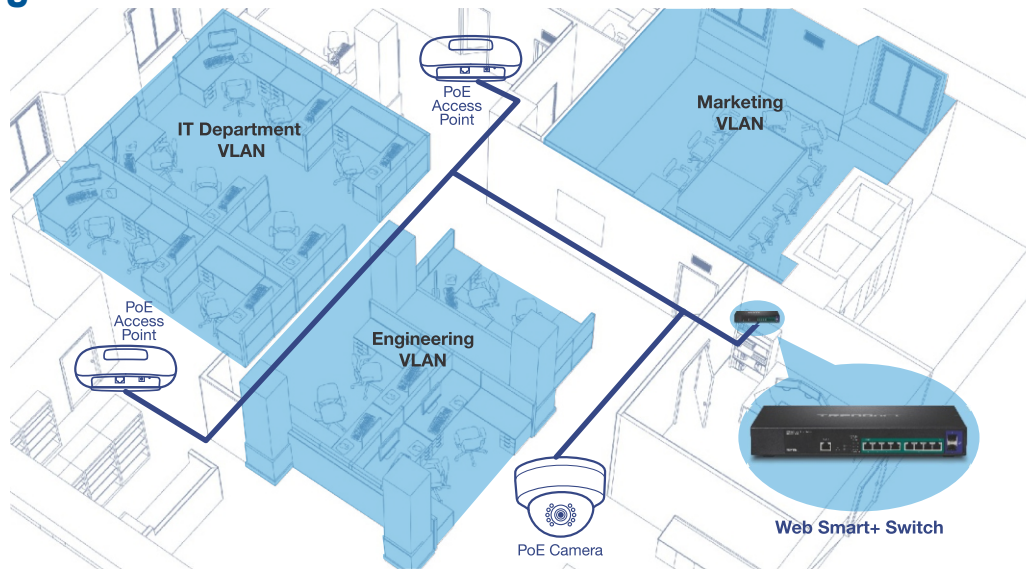### 2.5GBASE-T Full Power PoE+ Ports
Equipped with eight 2.5GBASE-T RJ-45 ports that provide higher gigabit speeds capable of up to 2.5Gbps over existing Cat5e or better cabling. Supplies up to 30W of PoE+ power per port with a total power budget of 240W.
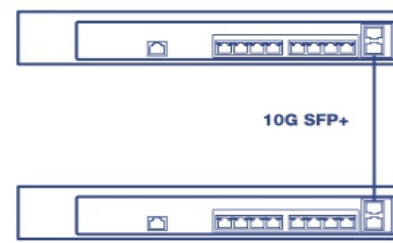
10G SFP+ Slots
Offers two 10G SFP+ slots for high-speed network connections providing a cost-effective solution in adding 10G link capability to an SMB network.

Networking Solution

Hardware Design
Provides 8 x 2.5GBASE-T PoE+ ports and 2 x 10G SFP+ slots for high-speed network connections, and 1U rack mountable.

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

Network Management
A broad range of network configurations are supported by: link aggregation, VLAN, bandwidth controls, IGMP, loopback detection, port mirroring, QoS, per port MAC restriction, and dynamic ARP inspection.

Full PoE+ Power Budget
Supplies up to 30 Watts of PoE/PoE+ power per port with a 240W PoE power budget

IP Routing
Supports up to 32 IPv4/IPv6 static routes.

2.5GBASE-T Technology
Connect 2.5GBASE-T supported devices at 2.5Gbps for increased throughput over existing Cat5e or better cabling.

Troubleshooting
Traffic statistics and a convenient cable diagnostic test aid in network troubleshooting.

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Specifications

Standards	• IEEE 802.1d • IEEE 802.1p • IEEE 802.1Q • IEEE 802.1s • IEEE 802.1w • IEEE 802.1X • IEEE 802.1ab • IEEE 802.3u • IEEE 802.3x • IEEE 802.3z • IEEE 802.3ab • IEEE 802.3ad • IEEE 802.3ae • IEEE 802.3af (15.4 Watts/port) • IEEE 802.3at (30 Watts/port) • IEEE 802.3bz
Device Interface	• 8 x 2.5GBASE-T PoE+ ports (100Mbps/1Gbps/2.5Gbps) • 2 x 10G SFP+ slots (1Gbps/10Gbps) • 1 x RJ-45 console port • LED indicators • Reset button
Data Transfer Rate	• Fast Ethernet: 100Mbps (half duplex), 200Mbps (full duplex) • Gigabit Ethernet: 2000Mbps (full duplex) • 2.5 Gigabit Ethernet: 5Gbps (full duplex) • 10 Gigabit Ethernet: 20Gbps (full duplex)
Performance	• Switch fabric: 80Gbps • RAM buffer: 2MB • MAC address table: 32K entries • Jumbo frames: 9KB • Forwarding mode: store and forward • Forwarding rate: 59.5Mpps (64-byte packet size)
Management	• CLI (Console / Telnet / SSHv2) for IP address settings and password configuration only • HTTP / HTTPS (SSL v2/3 TLS 1.2) web based GUI • SNMP v1, v2c, v3 • SNMP trap (Up to 4 receivers) • RMON v1/2/3/9 • Cable diagnostic test • Static unicast entries • LLDP • LLDP-MED • IPv6 neighbor discovery, IPv6 static IP, and DHCPv6
MIB	• MIB II RFC 1213 • Bridge MIB IEEE8021-Q • RMON (Group 1,2,3,9) RFC 2819 • Interface group MIB using SMIv2 RFC 2863 • Multicast group membership discovery MIB RFC 5519 • SNMP management frameworks RFC 3411 • User-based security model for SNMPv3 RFC 3414 • View-based access control model for SNMP RFC 3415 • Ethernet-like MIB RFC 3635 • 802.3 MAU MIB RFC 3636 • LLDP-MED PoE RFC 3621 • Entity MIB v3 RFC 4133 • Bridge MIB RFC 4188 • IP MIB RFC 4293 • RADIUS authentication client MIB RFC 4668 • RADIUS accounting MIB RFC 4670 • LLDP-MIB IEEE802.1AB • PAE MIB IEEE 802.1X

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 and 802.3ad dynamic LACP (Up to 4 groups)
Quality of Service (QoS)	• 802.1p Class of service (CoS) • DSCP (Differentiated Services Code Point) • Bandwidth control per port • Queue Scheduling: strict priority (SP), deficit weighted round robin (DWRR)
VLAN	• Multiple management VLAN assignment • Asymmetric VLAN • 802.1Q tagged VLAN • Dynamic GVRP • Up to 32 VLAN groups, ID range 1-4094 • Private VLAN • Voice VLAN (16 user defined OUIs)
Multicast	• IGMP snooping v1, v2, v3 • IGMP fast leave • Static multicast entries • MLD Snooping v1, v2 • Up to 1K multicast groups
Port Mirror	• One to one • Many to one
Storm Control	• Broadcast (Min. limit: 10pps) • Multicast (Min. limit: 10pps) • Destination lookup failure (Min. limit: 10pps)
Access Control	• 802.1X port-based network access control • MAC-based authentication • RADIUS (Up to 5 servers) • TACACS+ (Up to 5 servers) • Local dial in user authentication • DHCP IPv4 snooping • Duplicated address detection • Loopback detection • Head-of-line (HoL) blocking prevention • Denial of service (DoS) prevention • Trusted Host/IP Access List • Port Security/MAC address learning restriction (Up to 64 entries) • Destination MAC filter • Static/dynamic ARP inspection
ACL IPv4 & IPv6	• MAC address • VLAN ID • ARP/RARP • Ether type • ICMP type 1-255 • IP protocol 1-255 • TCP/UDP port 1-65535 • 802.1p • DSCP • IPv4/IPv6 address • Up to 256 entries
Layer 3 Features	• IPv4 / IPv6 static routing • IP interfaces: Up to 8 • Routing table entries: Up to 32 (IPv4 / IPv6) • ARP table (up to 1024 entries) • DHCP server, relay, option 82 • Inter-VLAN routing

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Power	• Input: 100 - 240 V AC, 50/60 Hz • Max. consumption: 27.36W (No PoE load)
PoE	• PoE budget: 240W • 802.3at: up to 30W per port (ports 1-8) • Mode A: Pins 1,2 for power+ and pins 3,6 for power- (mode A) • PD auto/manual classification • PoE port priority • PoE power delay • PoE power scheduling • Over current/short circuit protection
Smart Fan / Acoustics	• Quantity: 2 (Hot swappable) • Noise Level: 41.7 dBA (max.)
MTBF	• 433,898 hours
Operating Temperature	• 0 – 50°C (32 - 122°F)
Operating Humidity	• Max. 80% non-condensing
Dimensions	• 330 x 230 x 44.45mm (13 x 9.1 x 1.75 in.) • Rack mountable 1U height
Weight	• 2.71kg (5.98 lbs.)
Certifications	• CE • FCC • UL
Warranty	• 3 year

PACKAGE CONTENTS

• TPE-30102WS
• Quick Installation Guide
• Power cord
• RJ-45 to RS-232 console cable (1 m / 3.28 ft.)
• Rackmount kit

Updated: 2/12/2018