# TRENDNET

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

TEG-30102WS (v1.0R)

- 8 x 2.5GBASE-T RJ-45 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 2.5GBASE-T Web Smart Switch with eight 2.5GBASE-T ports and two 10G SFP+ slots, model TEG-30102WS, delivers advanced management features with an 80Gbps switching capacity. The TEG-30102WS is equipped with 2.5GBASE-T RJ-45 ports that provide higher gigabit speeds capable of up to 2.5Gbps over existing Cat5e or better cabling. 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.

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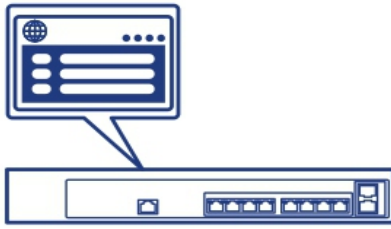
Web Smart Management
Provides an easy to use web-based GUI management interface for advanced traffic management controls, IP routing, VLAN, QoS, access controls, link aggregation, troubleshooting, SNMP monitoring, per port MAC restriction, and dynamic ARP inspection.
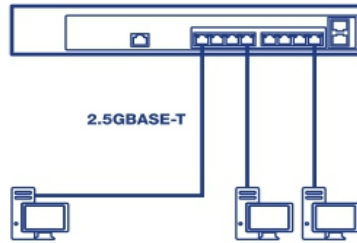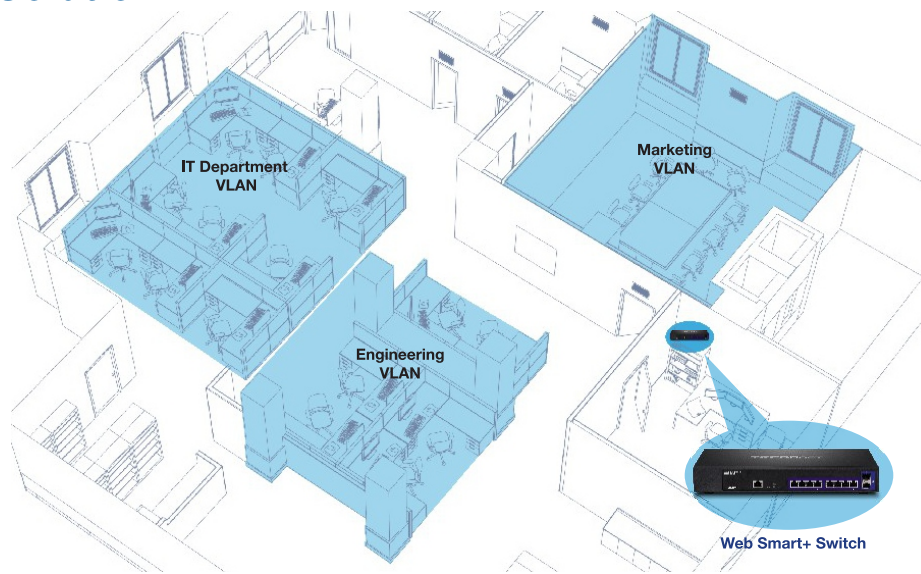
2.5GBASE-T Ports
Equipped with eight 2.5GBASE-T RJ-45 ports that provide higher gigabit speeds capable of up to 2.5Gbps over existing Cat5e or better cabling.
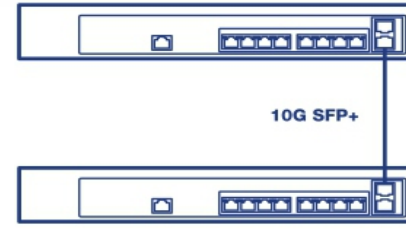
10G SFP+ Slots
Offers two 10G SFP+ slots for high-speed network connections providing a cost-effective solution in adding 10G link capability to an SMB network.

Networking Solution

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

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

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

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

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.

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 802.3bz
Device Interface	• 8 x 2.5GBASE-T 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 groups 1/2/3/9 • Cable diagnostic test • Static unicast entries • LLDP • 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 • 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 IEEE802.1X
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 per port) • Destination MAC filter • Static/dynamic ARP inspection
ACL IPv4 & IPv6	• MAC address • VLAN ID • ARP/RARP • EtherType • 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 – 240V AC, 50/60 Hz • Max. Consumption: 27.36W
Smart Fan / Acoustics	• Quantity: 2 (Hot swappable) • Noise Level: 41.7 dBA (max.)
MTBF	• 61,320 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	• 2.33kg (5.12 lbs.)
Certifications	• CE • FCC • UL
Warranty	• Lifetime

PACKAGE CONTENTS

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