



# 52-Port Gigabit Web Smart Switch with 10G SFP+ ports

# TEG-3524S (v1.0R)

- 48 x Gigabit ports
- 4 x 10 SFP+ ports
- · Easy-to-use web-based management interface
- Supports IPv6, LACP, VLAN, QoS, and IGMP Snooping
- · Bandwidth control per port
- Private, Multicast, and Voice VLAN support
- 176Gbps switching capacity
- IEEE 802.3ae (SFP+) compliant
- NDAA / TAA compliant (U.S. and Canada only)

TRENDnet's Gigabit Web Smart Switch series offers advanced L2+ features with enhanced traffic management controls to meet the evolving demands of today's SMB networks. These managed switches with SFP+ ports each come 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 these managed switches with 10G SFP+ ports powerful solutions 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.

These gigabit managed switches come equipped with RJ-45 ports that provide gigabit speeds over your existing Cat5e or better cabling. The gigabit managed switches also each offer four dedicated 10G SFP+ ports for high-speed network connections, providing a cost-effective solution in adding 10G link capability to an SMB network. The strategic design of the switches lowers energy consumption and eliminates distracting operating noise. TRENDnet's reliable managed switches with SFP+ ports offer cost-effective solutions to increase your network's throughput.





# 10G SFP+ Ports

Offers four ultra-fast 10G SFP+ ports for high-speed network connections, providing a cost-effective solution in adding 10G link capability.



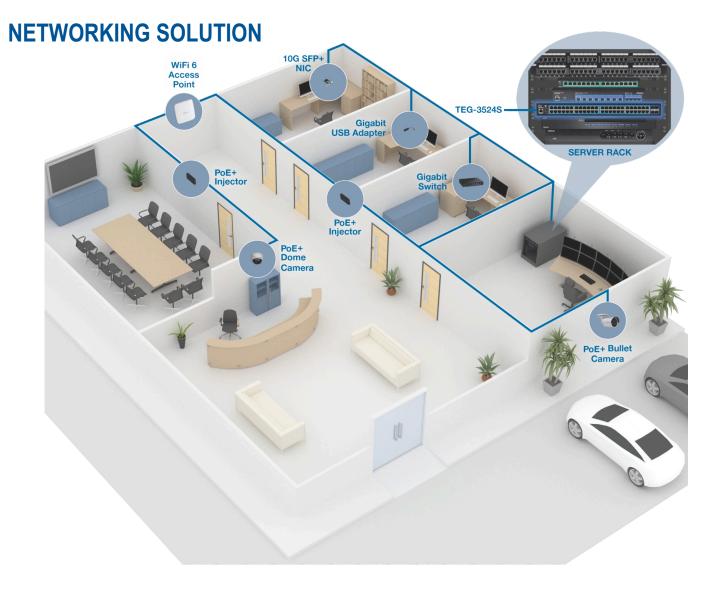
# Integration Flexibility

Managed switch features include access control lists, VLAN, IGMP/MLD snooping, QoS, RMON, SNMP trap, and syslog for monitoring and flexible network integration.



# IPv4/IPv6 Static Routing

Free up router resources by offloading routing processes to the managed switch by using the L2+ IPv4/IPv6 static routing feature to efficiently route traffic at the switch level.



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# **FEATURES**

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# **Hardware Design**

Provides gigabit ports for device connections, 10G SFP+ ports for fiber applications, and a 1U 19" rackmount design with brackets included



# Traffic Management

Managed switch features include: Link aggregation, 802.1Q VLAN, Voice VLAN, Multicast VLAN, RSTP, MSTP, Loopback Detection, QoS, and port bandwidth management



# Access Control

The managed switch include advanced features, such as ACL, SSL, MAC/port filtering, 802.1X, TACACS+, and RADIUS are compatible with layered access controls



# **Housing Design**

Sturdy rack mountable metal housing



# 10G SFP+ Ports

Offers four dedicated 10G SFP+ ports for high-speed network connections, providing a costeffective solution in adding 10G link capability to an SMB network



# IPv4/IPv6 Static Routing

Offload routing processes to the managed switch by using the L2+ IPv4/IPv6 static routing feature to efficiently route traffic at the switch level



# Monitoring

Jumbo Frame

performance

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

Sends larger packets, or Jumbo

Frames (up to 10KB) for increased



# LED Indicators

LED indicators on this managed switch with SFP+ ports convey port status



# **IPv6 Ready**

This managed switch with SFP+ ports supports IPv6 configuration and IPv6 neighbor discovery



# Troubleshooting

A convenient cable diagnostic test and traffic statistics aid in network troubleshooting



# Smart Fan

The smart fan on this managed switch saves energy by autoadjusting the fan speed and use based on cooling needs

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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 802.3
- IEEE 802.3u
- IEEE 802.3x
- IEEE 802.3z
- IEEE 802.3ab
- IEEE 802.3ad
- IEEE 802.3ae
- IEEE 802.3az

#### **Device Interface**

- 48 x Gigabit ports
- 4 x 10G SFP+ ports
- 1 x RJ-45 console port (out-of-band)
- LED indicators

# Data Transfer Rate

- Ethernet: 10Mbps (half duplex), 20Mbps (full duplex)
- Fast Ethernet: 100Mbps (half duplex), 200Mbps (full duplex)
- Gigabit Ethernet: 2000Mbps (full duplex)
- SFP: 2000Mbps (full duplex)
- SFP+: 20Gbps (full duplex)

# Performance

- Switch fabric: 176Gbps
- RAM buffer: 2MB
- MAC Address Table: 32K entries
- Jumbo Frames: 10KB
- HOL Blocking Prevention
- Forwarding rate: 130.95Mpps (64-byte packet size)

# Management

- CLI (Telnet / SSHv2)
- 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 intf 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
- Private VLAN (Protected Ports)
- Voice VLAN (10 user defined OUIs)

# Multicast

- IGMP Snooping v1, v2, v3 (per VLAN)
- 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

IPv4 / IPv6 static routing

ARP table (up to 128 entries)

Max. consumption: 20.85W

Noise Level: 38.6 dBa (max.)

· IP interfaces: Up to 6

Inter-VLAN routing

Power

supply

Fan/Acoustics

Quantity: 1

Smart Fan

• 175,750 hours

Operating Temperature

**Operating Humidity** 

3.408kg (7.51 lbs.)

Dimensions

Certifications

Weight

• CE

FCC

Warrantv

• 3 year

0° – 50° C (32° – 122° F)

Max. 95% non-condensing

• 440 x 255 x 44mm (17.32 x 10.04 x 1.73 in.)

MTBF

- 802.1p
- TOS (IPv4 only)
- IPv4 Address and Mask (IPv4 only)
- IPv6 Address and Prefix Length (IPv6 only)

Routing table entries: Up to 32 (IPv4 / IPv6)

Input: 100 – 240V AC, 50/60Hz, internal power

TEG-3524S

#### Layer 3 Features

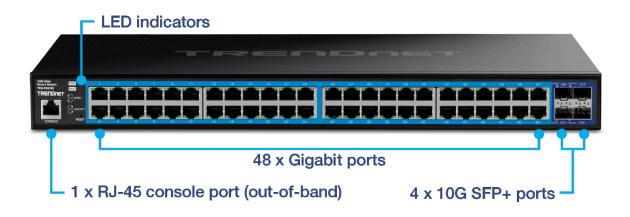


#### **Package Contents**

- TEG-3524S
- Quick Installation Guide
- Power cord (1.5m / 5 ft.)
- Console cable (1m / 3.28ft.)
- 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.

# **52-Port Gigabit Web Smart Switch with 10G SFP+ ports** TEG-3524S





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