



48-Port Gigabit Web Smart Switch TEG-448WS (C1.0R)

- IPv6, 802.3ad, Private and Voice VLAN support
- 48 x Gigabit ports
- 4 shared SFP slots
- Rack-mount metal housing
- Smart fans reduce energy consumption

TRENDnet's 48 Port Gigabit Web Smart Switch, model TEG-448WS, delivers advanced management features with a 96 Gbps switching capacity. This rack-mountable IPv6 ready switch comes with an intuitive web-browser interface, and smart fans which turn on when needed. Advanced traffic management, access, trouble shooting, and monitoring protocol support makes this a powerful backbone solution for SMB networks.



Hardware Design

Rack-mountable 1U metal housing features 48 Gigabit ports and 4 shared SFP slots



IPv6 Ready

This 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

Real time traffic comparison charts, error group charts, and a convenient cable diagnostic test aid in rapid troubleshooting



Access Control

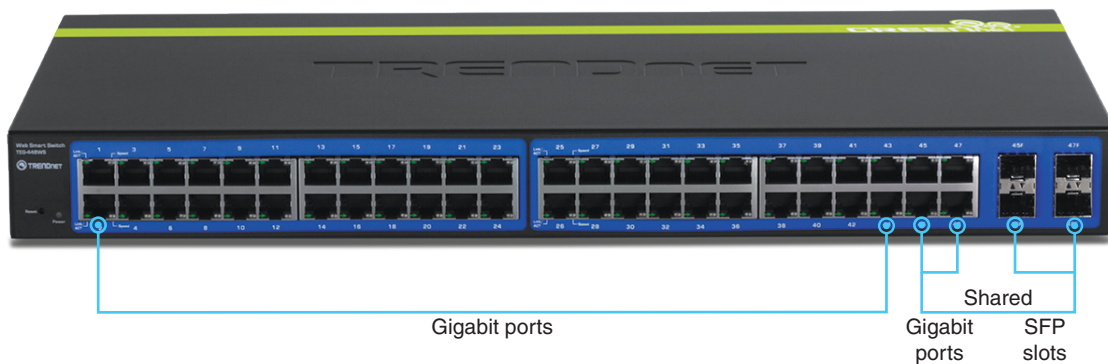
Features such as ACL, SSL, MAC/port filtering, 802.1X, TACACS+, and RADIUS are compatible with layered security controls



Monitoring

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

Networking Solution



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 802.3az

Device Interface

- 48 x Gigabit ports (ports 1-48)
- 4 x Shared SFP slots (shared with ports 45-48)
- LED indicators

Data Transfer Rate

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

Performance

- Switch fabric: 96 Gbps
- RAM buffer: 1 MB
- MAC Address Table: 16K entries
- Jumbo Frames: 10 KB
- HOL Blocking Prevention
- Forwarding rate: 71.4 Mpps (64-byte packet size)

Management

- 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
- Virtual Cable Test
- IPv6: IPv6 Neighbor Discovery, IPv6 Static IP, DHCPv6, Auto configuration

MIB

- MIB II RFC 1213
- Bridge MIB RFC 1493
- Bridge MIB Extension RFC 2674
- SNMPv2 MIB RFC 1907
- Ethernet Interface MIB RFC 1643
- Ethernet-like MIB RFC 2863
- Interface Group MIB RFC2233
- MIB Traps Convention RFC 1215
- RMON MIB RFC 1757, RFC 2819
- 802.1p MIB RFC 2674

- RADIUS Client Authentication MIB RFC 2618
- LLDP-MIB IEEE 802.1ab
- Ping MIB RFC 2925, RFC 4560

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

- Multiple management VLAN assignment
- Asymmetric 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)
- Static Multicast Address
- Up to 256 multicast entries

Port Mirror

- RX, TX, or Both
- One to one
- Many to one

Access Control

- 802.1X Port-Based Network Access Control, RADIUS, TACACS+
- Local Dial In User Authentication
- DHCP Snooping (per VLAN)
- Loopback Detection
- Duplicated Address Detection
- Trusted Host
- Denial of Service (DoS)

ACL IPv4 L2-L4 & IPv6

- MAC Address
- VLAN ID
- Ether Type (IPv4 only)
- IP Protocol 0-255
- TCP/UDP Port 1-65535
- 802.1p
- DSCP (IPv4 only)
- IPv6 Address (IPv6 only)

Compatibility

- Optional Software Utility: Windows® 8, 7, Vista, XP, Windows® 2003/2008 Server

Special Features

- Smart fans turn on when needed
- IPv6
- 802.3az power saving
- Rack mountable

Power

- Input: 100 - 240 V AC, 50/60 Hz, internal power supply
- Consumption: 34.5 Watts (max.)

Fan/Acoustics

- Quantity: 2
- Noise Level: 50 dB(A) (max.)

MTBF

- 527,110 hours

Operating Temperature

- 0 – 45°C (32 - 113°F)

Operating Humidity

- Max. 90% non-condensing

Dimensions

- 440 x 250 x 44.45 mm (17.3 x 9.8 x 1.75 in.)
- Rack mountable 1U height

Weight

- 4.08 kg (9 lbs.)

Certifications

- CE
- FCC

Warranty

- 3 year limited

Package Contents

- TEG-448WS
- Multi Language Quick Installation Guide
- CD-ROM (Utility & User's Guide)
- Power cord (1.8 m/6 ft.)
- Rack mount hardware

