



48-Port Gigabit Managed Layer 2 Switch with 4 Shared SFP Slots

TL2-G448 (v1.0R)

- Command Line interface management supported
- SNMP (v1, v2c, v3), 802.1X, RSTP, and MSTP support
- Supports Port Trunking, Mirroring, IGMP, Static and Dynamic VLAN, and RMON
- Private / Voice VLAN, QoS, and bandwidth controls
- 48 x Gigabit ports
- 4 x shared SFP slots and a console port
- 96 Gbps switching capacity
- Smart fans reduce energy consumption

TRENDnet's 48-Port Gigabit Managed Layer 2 Switch, model TL2-G448, has 48 x Gigabit ports, 4 x shared SFP slots, a console port, and an advanced Layer 2 management feature set. This IPv6 ready switch offers traffic management, troubleshooting, access control, and monitoring features.



Hardware Design

Provides 48 x Gigabit ports, 4 x shared SFP slots, a console port, and includes rackmount brackets.



Smart Fan

Smart fan saves energy by varying fan speed and use based on cooling needs



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, Private VLAN, Bandwidth Controls, GVRP, IGMP v1-v3, 802.1p Class of Service (CoS), Spanning Tree (STP, RSTP, and MSTP), and QoS queue scheduling.



Troubleshooting

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



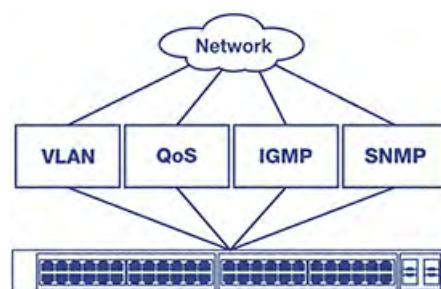
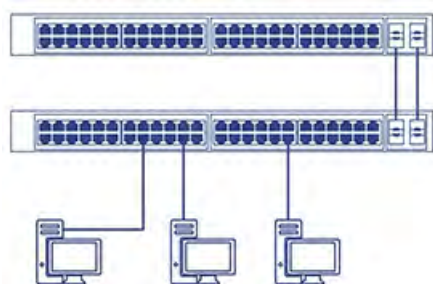
Access Controls

Features such as ACL, SSL, MAC / port filtering, Denial of Service controls, 802.1X, TACACS+, and RADIUS are compatible with layered network access controls.



Monitoring

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



High-Speed SFP

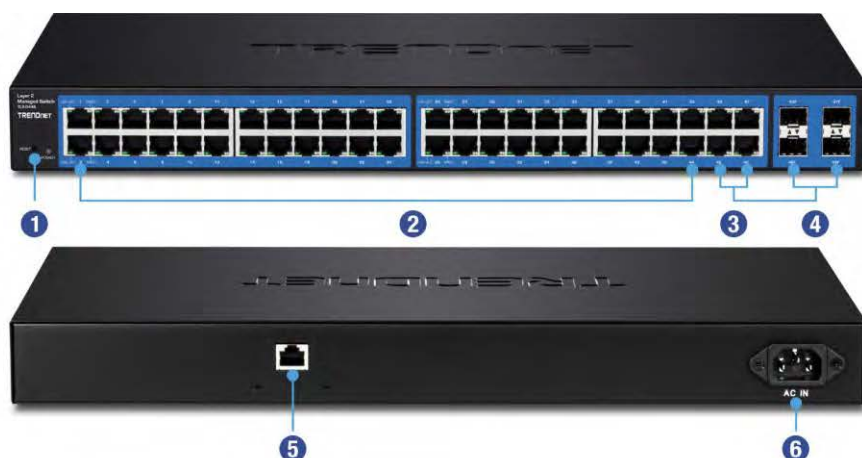
Offers four shared Gigabit SFP slots to allow for long distance fiber optic uplinks or downlink NAS / access server connections.

Smart Fans

Smart fans save energy and reduce operating noise by varying fan speed and usage based on real-time cooling needs.

Integration Flexibility

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



- 1 Reset button
- 2 Gigabit ports
- 3 Gigabit ports (shared)
- 4 SFP slots (shared)
- 5 Console port
- 6 Power port

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
- 4 x shared Gigabit SFP slots
- 1 x RJ-45 console port
- LED indicators
- Reset button

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

- CLI (Console / 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
- 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 RFC 2233
- 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
- Static Multicast Address
- Up to 256 multicast entries
- MLD Snooping v1, v2

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
- 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)

Management Utility

- Windows® 10, 8.1, 8, 7, Vista, XP, Windows® 2003 / 2008 Server

Power

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

Smart 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

- 3.98 kg (8.77 lbs.)

Certifications

- CE
- FCC
- UL

Warranty

- Limited Lifetime Warranty*

Package Contents

- TL2-G448
- Quick Installation Guide
- CD-ROM (Utility & User's Guide)
- Power cord (1.8 m / 6 ft.)
- RJ-45 to RS-232 console cable (100 mm / 3.94 in.)
- Rack mount kit

*TRENDnet offers a limited 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.

