

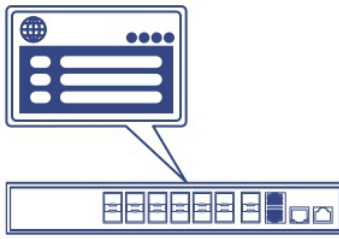


## 14-Port Gigabit Managed Layer 2 SFP Switch with 2 Shared RJ-45 Ports

TL2-FG142 (v1.0R)

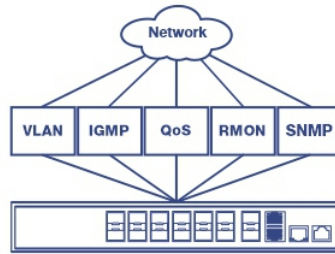
- 12 x SFP slots (100/1000Mbps)
- 2 x Shared Gigabit ports (RJ-45 or SFP slots)
- Web-based management interface
- Supports IPv6, LACP, VLAN, and IGMP Snooping
- 802.1Q tagged-based VLAN, Protocol, Private, and Voice VLAN support
- Q-in-Q VLAN tunneling and translation
- QoS with queue scheduling support
- Supports up to 32 IPv4/IPv6 static routes
- SFlow agent for layer 2 network analysis
- Bandwidth control per port
- 28Gbps switching capacity
- Connectivity Fault Management / OAM
- Supports 100/1000Base-FX fiber SFP modules
- Compatible with TEG-MGBRJ and TE100-MGBFX RJ-45 SFP modules
- Fanless design

TRENDnet's 14-Port Gigabit Managed Layer 2 SFP Switch with 2 Shared RJ-45 Ports, model TL2-FG142, delivers advanced management features and a 28Gbps switching capacity. This rack mountable IPv6-ready SFP fiber switch comes with an intuitive web-based user interface. Advanced traffic management controls, troubleshooting, and SNMP monitoring make this SFP switch a powerful solution for any SMB network. The TL2-FG142 provides 12 gigabit SFP slots and 2 shared gigabit ports (RJ-45 or SFP). Its fanless design is ideal for quiet environments that require silent operation. This SFP switch also features a modular design to accommodate both fiber SFP modules and RJ-45 copper SFP modules.



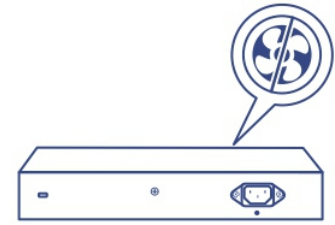
### L2 Management

Included features such as Command Line Interface, OAM, sFlow, Private/Voice VLAN, Static Routes, and Link Aggregation provide a robust combination of SMB management options.



### Integration Flexibility

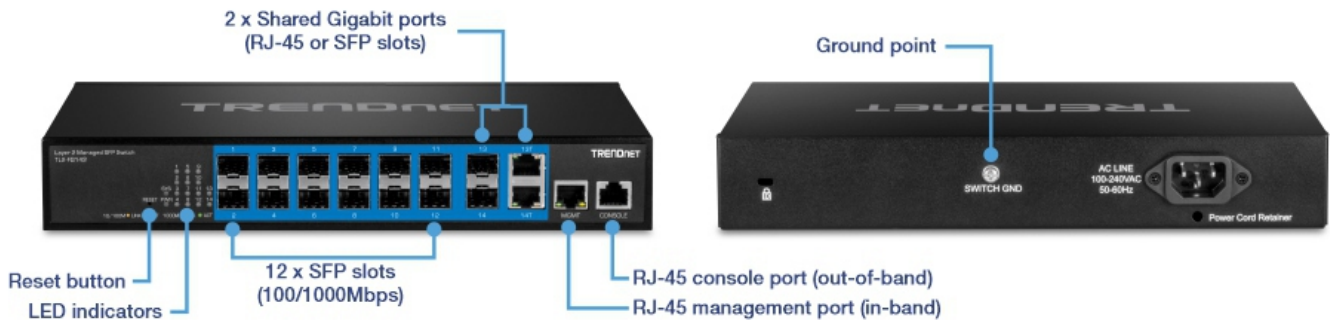
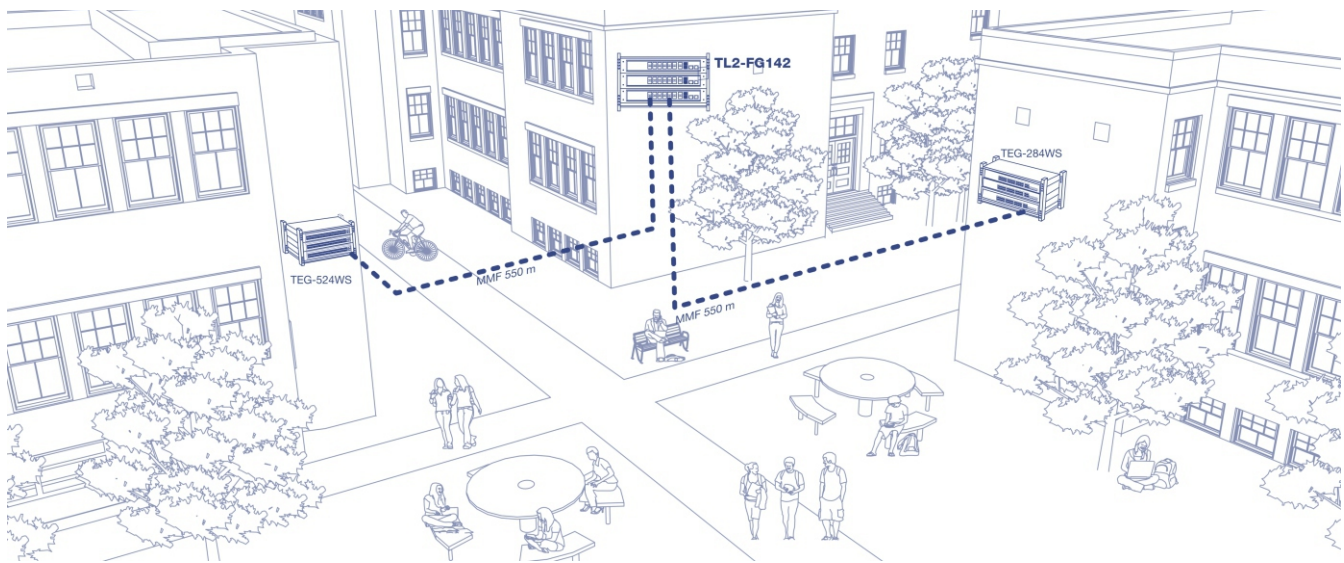
SFP switch managed features include access control lists, tagged-based VLAN, IGMP snooping, QoS, RMON, SNMP trap, and syslog for monitoring and flexible network integration.



### Fanless

Fanless design is ideal for quiet environments that require silent operation.

## NETWORKING SOLUTION



## FEATURES



### Hardware Design

SFP switch provides 12 gigabit SFP slots, 2 shared gigabit ports (RJ-45 or SFP), a management port, a console port, 28Gbps switching capacity, a built-in power supply, and rackmount brackets



### Traffic Management

A broad range of network configurations are supported by: 802.1ax Link Aggregation, Asymmetric VLAN, 802.1Q VLAN, Voice VLAN, RSTP, MSTP, Loopback Detection, 802.1p Class of Service (CoS), port bandwidth management, and QoS queue scheduling



### IP Routing

Supports up to 32 IPv4/IPv6 static routes



### Monitoring

sFlow, RMON, SNMP, SNMP Trap, Port Mirroring, and DDMI support



### Fanless

Fanless design reduces energy consumption and operating noise



### Access Control

SFP switch features access controls such as ACL, MAC/port filtering, 802.1X, TACACS+, and RADIUS



### IPv6 Ready

This SFP switch supports IPv6 configuration and IPv6 neighbor discovery

## SPECIFICATIONS

### Standards

- ITU-T G.8013/Y.1731
- IEEE 802.1ag
- IEEE 802.3ah
- IEEE 802.1d
- IEEE 802.1p
- IEEE 802.1Q
- IEEE 802.1s
- IEEE 802.1w
- IEEE 802.1X
- IEEE 802.1ab
- IEEE 802.1ad
- IEEE 802.3
- IEEE 802.3u
- IEEE 802.3x
- IEEE 802.3az (RJ-45 ports only)
- IEEE 802.3ab
- IEEE 802.1ax
- IEEE 802.3z

### Device Interface

- 12 x SFP slots (100/1000Mbps)
- 2 x Shared Gigabit ports (RJ-45 or SFP slots)
- 1 x RJ-45 management port (in-band)
- 1 x RJ-45 console port (out-of-band)
- Ground point
- LED indicators
- Reset button

### Data Transfer Rate

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

### Management

- CLI (Console / Telnet / SSHv2)
- HTTP / HTTPS web based GUI
- SNMP v1, v2c, v3
- SNMP trap
- RMON groups 1/2/3/9
- LLDP/LLDP-MED with optional TLVs
- ICMPv4/ICMPv6
- IPv4/IPv6
- IPv6 neighbor discovery
- DNS proxy
- Network time protocol (NTP)
- Green Ethernet/EEE or 802.3az per port
- Dual image

### Monitoring

- CPU load
- IP interfaces/routing table
- Internal system logging
- External syslog
- Port traffic statistics
- QoS queue counters
- QCL control list
- Port mirror (One to one, many to one)
- EVC (Ethernet Virtual Connection) statistics
- MAC address table
- Digital diagnostics monitoring (DDM) for SFP modules
- RFC2544 support
- SFlow statistics

### Performance

- Switching capacity: 28Gbps
- RAM buffer: 128MB
- MAC address table: 8K entries
- Jumbo frames: 9.6KB (configurable per port)
- Forwarding mode: store and forward
- Forwarding rate: 20.8Mpps (64-byte packet size)

### MIB

- MIB II RFC 1213
- Bridge MIB IEEE8021-Q
- RMON (Group 1,2,3,9) RFC 2819
- Interface group MIB using SMIPv2 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

- Spanning tree protocol (STP)
- Rapid spanning tree protocol (RSTP)
- Multiple spanning tree protocol (MSTP)

## Link Aggregation

- Static link aggregation and 802.3ad dynamic LACP (Up to 15 groups)

## Quality of Service (QoS)

- Class of service (CoS)
- Set default drop precedence (DPL), priority code point (PCP), drop eligible indicator (DEI)
- Differentiated Services Code Point (DSCP) classification and translation
- Set egress port scheduler, port shaping, port tag marking
- Bandwidth control per port/rate limiting
- Queue scheduling: strict priority (SP), deficit weighted round robin (DWRR)

## Storm Control

- Broadcast (Min. limit: 1pps)
- Multicast (Min. limit: 1pps)
- Unicast (Min. limit: 1pps)

## VLAN

- 802.1Q tagged VLAN
- 802.1ad VLAN Q-in-Q
- MAC-based VLAN
- Protocol-based VLAN
- VLAN ID range 1-4095
- Private VLAN/port isolation
- Voice VLAN (16 user defined OUIs)
- VLAN port to group and VID translation

## Carrier Ethernet / OAM

- IEEE 802.1ag Connectivity Fault Management (CFM)
- IEEE 802.3ah Link OAM
- Per port per queue dual leaky bucket service policers with PCP or DSCP marking per service point
- Statistics and tagging options per service point
- Y.1731 Fault Management (AIS, RDI, LCK)
- Y.1731 Performance Management (LM, DM)
- RFC2544 support
- Link OAM statistics, port status, event status
- Link state tracking
- Link OAM MIB Retrieval
- Maintenance entity point (MEP)

## Link Protection

- ITU-T G.8032/Y.1344 Ethernet ring protection switching (ERPS)
- ITU-T G.8031/Y.1342 Ethernet linear protection switching

## L3 Features

- IPv4 / IPv6 static routing
- IPv4 interfaces: Up to 8
- IPv6 interfaces: Up to 8
- Routing table entries: Up to 32 (IPv4 / IPv6)
- ARP table (up to 1024 entries)
- DHCP IPv4 server, relay, option 82
- Inter-VLAN routing

## Multicast

- IGMP snooping v1, v2, v3
- IGMP fast leave
- Static multicast entries
- MLD Snooping v1, v2
- Multicast VLAN Registration (MVR)
- Up to 1K multicast groups

## Access Control

- User account control with privilege level management
- Access management control
- Port Security/MAC address learning restriction (Up to 64 entries per port)
- 802.1X port-based/single/multiple or MAC-based authentication
- RADIUS (Up to 5 servers)
- TACACS+ (Up to 5 servers)
- RADIUS assigned QoS/VLAN/Guest VLAN
- Local dial in user authentication
- DHCP IPv4 snooping
- Loopback detection/prevention
- IP Source Guard
- Static/dynamic ARP inspection
- Create ACLs based on rate limit/EVC profile

## Power

- Input: 100 – 240V AC, 50/60 Hz
- Max. Consumption: 36W

## Fan/Acoustics

- Fanless design

## MTBF

- 118,034 hours

## Operating Temperature

- 0° – 50° C (32° – 122° F)

## Operating Humidity

- Max. 95% non-condensing

## Dimensions

- 280 x 185 x 44.45mm (11.02 x 7.28 x 1.75 in.)
- Rack mountable 1U height
- Wall mountable

## Weight

- 1.6 kg (3.52 lbs.)

## Certifications

- CE
- FCC
- UL

## Warranty

- 3 year

## Package Contents

- TL2-FG142
- Quick Installation Guide
- Power cord
- RJ-45 to RS-232 console cable (1.5m / 5 ft.)
- Wall mount and Rackmount kit

Toutes les références au débit ne sont données qu'à titre de comparaison. Les spécifications, la taille et la forme du produit sont sujettes à modification sans avis préalable, et l'apparence réelle du produit peut différer de celle illustrée ici.