



# 12-Port 10G Layer 2 Managed SFP+ Switch

# TL2-F7120 (v1.0R)

- 12 x 10G SFP+ slots
- Support 1Gbps / 10Gbps link speeds
- Web-based management
- CLI management
- Supports IPv6, LACP, VLAN, and IGMP Snooping
- 802.1Q tagged-based VLAN, GVRP, and Voice VLAN support
- QoS with queue scheduling support
- Supports inter-VLAN routing and IPv4/IPv6 static routing
- 240Gbps switching capacity
- Supports 10GBASE-X / 1000BASE-FX SFP fiber modules
- Smart fan
- Save rack space by mounting 2 x TL2-F7120 into 1U space with the optional ETH-F71 dual mount bracket (sold separately)
- Lifetime Warrantv
- NDAA / TAA compliant (U.S. and Canada only)

TRENDnet's 12-Port 10G Layer 2 Managed SFP+ Switch, model TL2-F7120, offers advanced traffic management controls to meet the evolving demands of SMB networks. This rack-mountable IPv6-ready managed switch comes with an intuitive web-based interface. Advanced management features on this ultra-fast 10G SFP+ switch 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 this a powerful solution 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.

Free up router resources by offloading routing processes to this 10G managed SFP+ switch by using the L2+ IPv4/IPv6 static routing feature to efficiently route traffic at the switch level. Take advantage of the available multicast and IGMP/MLD snooping features to optimize IP surveillance system performance, and minimize network traffic.

TRENDnet's 10G SFP+ switch features 12 x 10GSFP+ slots for high-speed network uplinks or downlink NAS/access server connections, providing a cost-effective solution in adding 10G link capability to an SMB network.









# High-Speed 10G SFP+

Offers 12 x 10G SFP+ slots for highspeed network uplinks or downlink NAS/ access server connections providing a cost-effective solution in adding 10G link capability to an SMB network.

# **L2 Management**

Fully configurable using the web-based management interface or CLI for management flexibility and streamlining configuration deployment to multiple switches.

# **Integration Flexibility**

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

# **NETWORKING SOLUTION**





# **FEATURES**



# **Hardware Design**

The 10Gb fiber switch provides 12 x 10G SFP+ slots, a built-in power supply, and 1U rackmount brackets



## **Switching Capacity**

Supports a 240Gbps switch capacity



## **Smart Fan**

The smart fan on the 10G SFP+ switch saves energy and eliminates distracting operating noise by auto adjusting the fan speed and use based on cooling needs



#### **LED Indicators**

LED indicators on the 10G SFP+ switch convey port status



#### Jumbo Frame

Sends larger packets, or Jumbo Frames (up to 9KB) for increased performance



# **Rackmount Design**

Save rack space by mounting 2 x TL2-F7120 into 1U space with the optional ETH-F71 dual mount bracket (sold separately)



### **IPv6 Ready**

This 10G SFP+ switch supports Ipv6 configuration and Ipv6 neighbor discovery



## IP Routing

Supports inter-VLAN routing and Ipv4/Ipv6 static routing



## **Traffic Management**

A broad range of network configurations are supported by this 10G managed SFP+ switch: 802.1ax link aggregation, , 802.1Q VLAN, Voice VLAN, RSTP, MSTP, Loopback Detection, GVRP, 802.1p Class of Service (CoS), port bandwidth management, and QoS queue scheduling



## **Troubleshooting**

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



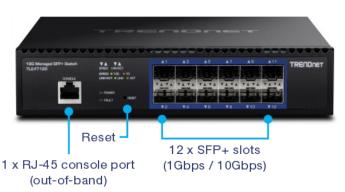
## **Access Control**

Features such as IPv4/IPv6 ACL, port security (mac entry restriction), 802.1X, TACACS+, and RADIUS are compatible with layered access controls



## Monitoring

RMON, SNMP, SNMP Trap, and Port Mirroring, and DDM are supported on the 10G SFP+ switch







# **SPECIFICATIONS**

#### **Standards**

- IEEE 802.1p
- IEEE 802.1Q
- IEEE 802.1s
- IEEE 802.1w
- IEEE 802.1X
- IEEE 802.1ab
- IEEE 802.1ax
- IEEE 802.3ab
- IEEE 802.3ae
- IEEE 802.3az
- IEEE 802.3x
- IEEE 802.3z

#### **Device Interface**

- 12 x SFP+ slots (1Gbps / 10Gbps)
- 1 x RJ-45 console port (out-of-band)
- LED indicators
- · Reset button

#### **Data Transfer Rate**

- Gigabit Ethernet: 2000Mbps (full duplex)
- 10 Gigabit Ethernet: 20Gbps (full duplex)

#### **Performance**

- · Switching capacity: 240Gbps
- RAM buffer: 2MB
- · MAC address table: 32K entries
- · Jumbo frames: 10KB
- · Forwarding mode: store and forward
- Forwarding rate: 178.6Mpps (64-byte packet size)

#### Management

- CLI (Console / Telnet / SSH)
- GUI (HTTP / HTTPS)
- IPv4/IPv6
- DNS
- TFTP/HTTP firmware upgrade
- TFTP/HTTP backup and restore configuration
- SNMP v1, v2c, v3
- SNMP trap
- RMON groups 1/2/3/9
- LLDP
- ICMPv4/ICMPv6
- Trace Route IPv4/IPv6
- · Virtual cable diagnostics test
- Simple Network time protocol (SNTP)
- Multi-User (Admin/User privilege)
- Dual image (Active/Backup)
- SNTP/NTP
- System Log (Local/Download/Remote Syslog)
- MAC entries (Static/Dynamic)
- ARP entries (Static/Dynamic)
- IPv6 neighbor discovery entries (Static/Dynamic)
- Port mirror (One to one, many to one)
- Digital diagnostics monitoring (DDM) for SFP modules
- Storm control: Broadcast, unknown multicast, unknown unicast (Min. limit: 16kbps)
- Port statistics counter
- Loopback detection
- CPU/Memory Utilization
- Real-time port statistics

## MIB

- RMON MIB RFC 1757
- MIB II RFC 1213
- Ethernet intf MIB RFC 1643
- Bridge MIB RFC 1493

#### **Spanning Tree**

- Rapid spanning tree protocol (RSTP)
- Multiple spanning tree protocol (MSTP) Up to 16 instances

#### **Link Aggregation**

- · Static link aggregation
- Dynamic LACP (Up to 8 groups, 8 ports per group)

## Quality of Service (QoS)

- · Class of service (CoS)
- Differentiated Services Code Point (DSCP)
- Bandwidth control per port/rate limiting
- Queue scheduling: strict priority (SP), weighted round robin (WRR)

#### **Storm Control**

- · Broadcast (Min. limit: 16Kbps)
- · Unknown Multicast (Min. limit: 16Kbps)
- Unknown Unicast (Min. limit: 16Kbps)

#### **VLAN**

- · Management access VLAN assignment
- 802.1Q tagged VLAN
- Dynamic GVRP
- Port Isolation
- Up to 256 VLAN groups, ID range 1-4094
- Voice VLAN
- Dynamic VLAN

#### L3 Features

- IPv4 / IPv6 static routing
- IPv4 interfaces: Up to 4
- IPv6 interfaces: Up to 8
- Routing table entries: IPv4: 63 max. / IPv6: 21 max.
- · Default route entries: 1 (IPv4 / IPv6)
- · ARP table (up to 192 entries)
- DHCP IPv4 relay
- Inter-VLAN routing

#### Multicast

- IGMP snooping v1, v2, v3
- MLD Snooping v1, v2
- · IGMP/MLD fast leave and querier
- IGMP/MLD dynamic router port, and report suppression
- Multicast filtering
- Up to 256 multicast groups

## **Access Control**

- 802.1X authentication (Local, RADIUS IPv4, TACACS+ IPv4)
- 802.1X RADIUS/Guest VLAN assignment, MACbased authentication
- DHCP snooping
- Port Security/MAC address learning restriction (Up to 256 entries per port)
- · Denial of Service (DoS)

## Power

- Input: 100 240V AC, 50/60 Hz, 1.5A
- Max. Consumption: 20W

# Fan/Acoustics

- Quantity: 1
- Smart Fan
- Noise Level: 38.6 dBa (max.)

### **MTBF**

• 224,641 hours

#### **Operating Temperature**

• 0° - 50° C (32° - 122° F)



### **Operating Humidity**

· Max. 90% non-condensing

#### **Dimensions**

- 210 x 230 x 44mm (8.26 x 9.06 x 1.73 in.)
- Rack mountable 1U height
- Dual 1U rackmount kit option (ETH-F71 sold separately)

#### Weight

• 1.6 kg (3.5 lbs.)

#### Certifications

- CE
- FCC
- UL

#### Warranty

• Lifetime

## **Package Contents**

- TL2-F7120
- Quick Installation Guide
- Power cord
- RJ-45 to RS-232 console cable (1.5m / 5 ft.)
- · Rackmount kit

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.

TRENDnet offers a 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.