

# JetStream 8-Port Gigabit Smart Switch

MODEL: T1500G-8T Datasheet



### Highlights

- 802.3af compliant PoE Port8 allows receiving power from a PoE source.
- Gigabit Ethernet connections on all ports provide full speed of data transferring
- Advanced security features include IP-MAC-Port Binding, ACL, Port Security, DoS Defend, Storm Control, DHCP Snooping, 802.1X, and Radius Authentication
- L2/L3/L4 QoS and IGMP snooping optimize voice and video applications
- WEB/CLI managed modes, SNMP, RMON bring abundant management features
- Dual Firmware Image improves reliability and up-time of your network



#### Overview

TP-Link JetStream Gigabit Smart Switch T1500G-8T is equipped with 8 gigabit RJ45 ports and the port 8 can receive power from PoE Power Sourcing Equipment (PSE). The switch provides high performance, enterprise-level QoS, useful security strategies and rich layer 2 management features.

TP-Link's JetStream Gigabit Smart Switch T1500G-8T is especially designed for the small and medium business networks that require efficient network management. T1500G-8T comes with a comprehensive set of features, such as Link Aggregation Group, 802.1Q VLAN, Access Control Lists (ACL), Quality of Service (QoS L2 to L4), Storm Control and IGMP Snooping to provide a small or medium-sized business with a network that is geared for growth while ensuring performance and reliability. What's more, its easy-to-use web management interface means faster setup and configuration with less downtime, providing the ideal solution for your business network.

#### IEEE 802.3at/af-compliant Power over Ethernet

T1500G-8T supports IEEE 802.3af/at standard for Power over Ethernet (PoE). It can obtain its power from either a PoE source or from an external AC power adapter. This gives an SMB flexibility when installing the switch in places where a power outlet is not present.

### Advanced QoS Features

To integrate voice, data and video service on one network, the switch applies rich QoS policies. Administrator can designate the priority of the traffic based on a variety of means including Port Priority, 802.1P Priority and DSCP Priority, to ensure that voice and video are always clear, smooth and jitter free. In conjunction with the Voice VLAN the switch supports, the voice applications will operate with much smoother performance.

#### Abundant Layer 2 Features

For more application of layer 2 switches, T1500G-8T supports a complete lineup of layer 2 features, including 802.1Q tag VLAN, Port Isolation, Port Mirroring, STP/RSTP/MSTP, Link Aggregation Group and 802.3x Flow Control function. Any more, the switches provide advanced features for network maintenance such as Loop Back Detection, Cable Diagnostics and IGMP Snooping. IGMP snooping ensures the switch intelligently forward the multicast stream only to the appropriate subscribers while IGMP throttling & filtering restrict each subscriber on a port level to prevent unauthorized multicast access.

## Enterprise Level Management Features

T1500G-8T is easy to use and manage. It supports various user-friendly standard management features, such as intuitive web-based Graphical User Interface (GUI) or SNMP (v1/2/3) and RMON support enables the switch to be polled for valuable status information and send traps on abnormal events.

## Specifications

Hardware Specifications & Performance				
Product Picture		Option reasons the state of the		
Model		T1500G-8T		
General	Standards and Protocols	IEEE 802.3i, IEEE 802.3u, IEEE 802.3ab, IEEE802.3z, IEEE 802.3ad, IEEE 802.3x, IEEE 802.3af, IEEE 802.1d, IEEE 802.1s, IEEE 802.1w, IEEE 802.1p		
	Interfaces	8 10/100/1000Mbps RJ45 Ports, Port8 obtain power from PoE source (Auto-Negotiation/Auto MDI/MDIX)		
	Network Media	10BASE-T: UTP category 3, 4, 5 cable (≤100m) 100BASE-TX/1000Base-T: UTP category 5, 5e or above cable (≤100m)		
	Switching Capacity	16Gbps		
Performance	Packet Forwarding Rate	11.9Mpps		
	MAC Address Table	8K		
	Packet Buffer	512K		
	Jumbo Frame	9KB		
	Power Supply	100-240V, 50/60Hz External Power Adapter(Output: 12VDC/1A) Obtain power from PoE source		
	Maximum Power Consumption	Maximum (PoE on): 5.75W (220V/50Hz)		
Physical &	Dimensions (W × D × H)	209 × 126 × 26 mm		
Environment	FAN Quantity	Fanless		
	Operating Temperature	0°C to 40°C (32°F to 104°F)		
	Storage Temperature	-40°Cto 70°C (-40°Fto 158°F)		
	Operating Humidity	10% to 90%RH, non-condensing		
	Storage Humidity	5% to 90%RH, non-condensing		
	Certification	CE, FCC		

Software F	eatures	
L2 Features	Link Aggregation - static link aggregation - 802.3ad LACP - Up to 6 aggregation groups, containing 4 ports per group  Spanning Tree Protocol - 802.1D STP - 802.1w RSTP - 802.1s MSTP - STP Security: Loop back detection, TC Protect, BPDU Filter/Protect, Root Protect	<ul> <li>Loopback Detection</li> <li>LLDP (LLDP-MED)</li> <li>802.3x Flow Control for Full Duplex mode and backpressure for Half Duplex mode</li> </ul>
L2 Multicast	<ul><li>256 IGMP groups</li><li>IGMP Snooping</li><li>IGMP v1/v2/v3 Snooping</li><li>IGMP Fast Leave</li></ul>	<ul><li>- Multicast VLAN</li><li>- IGMP Snooping Querier</li><li>- Static Multicast Forwarding</li></ul>
VLAN	VLAN Group  - Max 512 VLAN Groups (out of 4K VIDs)  802.1Q Tagged VLAN	
QoS	<ul> <li>802.1p/DSCP priority</li> <li>4 Priority Queues</li> <li>Queue Scheduling</li> <li>SP (Strict Priority)</li> <li>WRR(Weighted Round Robin)</li> <li>SP+WRR</li> </ul>	<ul><li>Bandwidth Control</li><li>Port/Flow based Rating Limiting</li><li>Voice VLAN</li></ul>
Security	IP-MAC-Port Binding Dos Defend Dynamic ARP Inspection DHCP Snooping Static/Dynamic Port Security Up to 64 MAC addresses per port Broadcast/Multicast/Unicast Storm Control kbps/ratio/pps control mode IP/Port/MAC based access control	*802.1X     - Port based authentication     - MAC(Host) based authentication     - Guest VLAN     - Support Radius authentication and accountability     *Port Isolation     *Secure web management through HTTPS with SSLv3/TLS1.0     *Secure Command Line Interface(CLI) management with SSHv1/SSHv2
Management	Web-based GUI Command Line Interface(CLI) through console telnet SNMPv1/v2c/v3 SNMP Trap/Inform RMON (1,2,3,9 groups) DHCP Snooping	• DHCP Option82 • CPU Monitoring • Cable Diagnostics • Access Control • SNTP • System Log • Dual Image
MIBs	<ul> <li>MIB II (RFC1213)</li> <li>Interface MIB (RFC2233)</li> <li>Ethernet Interface MIB (RFC1643)</li> <li>Bridge MIB (RFC1493)</li> <li>P/Q-Bridge MIB (RFC2674)</li> <li>RMON MIB (RFC2819)</li> </ul>	<ul> <li>RMON2 MIB (RFC2021)</li> <li>Radius Accounting Client MIB (RFC2620)</li> <li>Radius Authentication Client MIB (RFC2618)</li> <li>Remote Ping, Traceroute MIB (RFC2925)</li> <li>Support TP-LINK private MIBs</li> </ul>

# Ordering Information

Host Switch		
Product Model	Description	
T1500G-8T	JetStream 8-Port Gigabit Smart Switch	
Routers		
Product Model	Description	
TL-ER604W	SafeStream Wireless N Gigabit Broadband VPN Router	
TL-R470T+	Load Balance Broadband Router	

