

TP-LINK®

JetStream

L2 Managed Switch

T2500-28TC Datasheet

JetStream 24-Port 10/100Mbps + 4-Port Gigabit L2 Managed Switch
T2500-28TC (TL-SL5428E)



Overview

TP-LINK JetStream L2 managed switch T2500-28TC provides high performance, enterprise-level QoS, advanced security strategies and rich layer 2 management features. Moreover, T2500-28TC also comes equipped with multiple combo SFP slots, expanding your network flexibly.

T2500-28TC has robust security and management features. The IP-MAC-Port-VID Binding and Access Control List (ACL) functions protect against broadcast storm, ARP and Denial-of-Service (DoS) attacks, etc. Quality of Service (QoS, L2 to L4) provides enhanced traffic management capabilities to move your data smoother and faster. Anymore, the easy-to-use web management interfaces, along with CLI, SNMP and RMON, mean faster setup and configuration with less downtime. For workgroup and departments requiring cost-sensitive Layer 2 Switch and gigabit capability, TP-LINK JetStream L2 managed Switch T2500-28TC provides you the ideal access-edge solution.

Secure Networking

TP-LINK JetStream L2 managed switch T2500-28TC provides IP-MAC-Port Binding, Port Security, Storm control and DHCP Snooping which protect against broadcast storms, ARP attacks, etc. It integrates some typical DoS attacks to select. You can protect these attacks more easily ever than before. In addition, the Access Control Lists (ACL, L2 to L4) feature restricts access to sensitive network resources by denying packets based on source and destination MAC address, IP address, TCP/UDP ports and even VLAN ID. Moreover, the switch supports 802.1X authentication, which is used in conjunction with a RADIUS server to require some authentication information before access to the network is allowed. Guest VLAN function supports to enable the non-802.1X clients to access the specific network resource.

Ethernet OAM

The T2500-28TC provide 802.3ah OAM and Device Link Detection Protocol (DLDP) functions improving monitor and troubleshoot Ethernet networks, help facilitate network management.

DDM

The T2500-28TC provide DDM (Digital Diagnostic Monitoring) function to view the status of SFP modules inserting to the Switch and to configure alarm settings, warning settings, temperature threshold settings, voltage threshold settings, bias current threshold settings, TX power threshold settings, and RX power threshold settings.

Optimized Voice and Video Applications

To integrate voice, data and video service on one network, T2500-28TC applies rich QoS policies. Administrator can designate the priority of the traffic based on a variety of means including IP or MAC address, TCP or UDP port number, etc, so voice and video are always clear, smooth and jitter free. In conjunction with the Voice VLAN the switch supporting, the voice applications will operate with much smoother performance.

For other multimedia-on-demand application such as IPTV, T2500-28TC provides advanced features for easy stream management. For example, 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

T2500-28TC is easy to use and manage. It supports various user-friendly standard management features, such as intuitive web-based Graphical User Interface (GUI) or industry-standard Command Line Interface (CLI), either administration traffic can be protected through SSL or SSH encryptions. SNMP (v1/v2c/v3) and RMON support enables the switch to be polled for valuable status information and send traps on abnormal events.

Specifications

Hardware Features & Performance		
Product Picture		
Model		T2500-28TC
Hardware Features		
General	Interfaces	24 10/100Mbps RJ45 Ports
		4 10/100/1000Mbps RJ45 Ports
4 Combo 1000Mbps SFP Slots		
	Console Port	1 RJ45 Console Port
Performance	Switching Capacity	12.8Gbps
	Forwarding Rate	9.5Mpps
	MAC Address Table	8K
	Packet Buffer Memory	4Mb
	Jumbo Frame	2048Bytes
Physical & Environment	Power Supply	100-240V, 50/60Hz
	Maximum Power Consumption	15W (220V/50Hz)
	Dimension (W * D * H)	17.3*7.1*1.7 in.(440*180*44 mm)
	Weight	2.7kg
	FAN Quantity	0
	Operation Temperature	0°C ~40°C (32 °F ~104 °F)
	Storage Temperature	-40°C ~70°C (-40 °F ~158 °F)
	Operation Humidity	10%~90% non-condensing
	Storage Humidity	5%~90% non-condensing
	Certification	CE, FCC

Software Features		
L2 Features	<ul style="list-style-type: none"> • Link Aggregation <ul style="list-style-type: none"> - Static Link Aggregation - 802.3ad LACP - Up to 14 aggregation groups, containing 8 ports per group • Spanning Tree Protocol <ul style="list-style-type: none"> - 802.1D STP - 802.1w RSTP - 802.1s MSTP - STP Security: Loop back detection, TC Protect, BPDU Filter/Protect, Root Protect 	<ul style="list-style-type: none"> • Loopback Detection • Flow Control • Port Mirroring <ul style="list-style-type: none"> - One-to-One - Many-to-One - Flow-Based - Tx/Rx/Both
L2 Multicast	<ul style="list-style-type: none"> • Support 256 IGMP groups • IGMP Snooping <ul style="list-style-type: none"> - IGMP v1/v2/v3 Snooping - IGMP Fast Leave - Multicast VLAN - IGMP Snooping Querier - Unknown IGMP Throttling - Static Multicast 	<ul style="list-style-type: none"> • MLD Snooping <ul style="list-style-type: none"> - MLD v1/v2 Snooping - MLD Snooping Querier - Fast Leave - Static Multicast
VLAN	<ul style="list-style-type: none"> • VLAN Group <ul style="list-style-type: none"> - Max. 4K VLAN Groups • 802.1Q Tagged VLAN • MAC VLAN <ul style="list-style-type: none"> - 512 Groups • Protocol VLAN <ul style="list-style-type: none"> - 16 Groups - 16 Protocols 	<ul style="list-style-type: none"> • Private VLAN • GVRP • VLAN VPN (QinQ) <ul style="list-style-type: none"> - Selective QinQ - Voice VLAN

Software Features

QoS	<ul style="list-style-type: none"> • 802.1p/DSCP priority • 4 Priority Queues • Queue Scheduling <ul style="list-style-type: none"> - SP(Strict Priority) - WRR(Weighted Round Robin) - SP+WRR • Bandwidth Control • Port/Flow based Rating Limiting 	<ul style="list-style-type: none"> • Actions for flows <ul style="list-style-type: none"> - Mirror(to supported interface) - Redirect(to supported interface) - Rate Limit - QoS Remark
ACL	<ul style="list-style-type: none"> • Supports up to 64 entries • Time-Based ACL • MAC ACL <ul style="list-style-type: none"> - Source MAC - Destination MAC - VLAN ID - User Priority - EtherType • Combined ACL <ul style="list-style-type: none"> - Source MAC - Destination MAC - VLAN ID - EtherType - User Priority - Source IP - Destination IP 	<ul style="list-style-type: none"> • Standard IP ACL <ul style="list-style-type: none"> - Source IP - Destination IP • Extended IP ACL <ul style="list-style-type: none"> - Source IP - Destination IP - Fragment - IP Protocol - TCP Flag - TCP/UDP Port - DSCP/IP TOS
Security	<ul style="list-style-type: none"> • IP-MAC-Port Binding • DoS Defend • Dynamic ARP Inspection • IP Source Guard • Static/Dynamic Port Security <ul style="list-style-type: none"> - Up to 64 MAC addresses per port • Broadcast/Multicast/Unicast Storm Control <ul style="list-style-type: none"> - kbps/ratio/pps control mode • 802.1X <ul style="list-style-type: none"> - Port based authentication - MAC(Host) based authentication - Guest VLAN - Support Radius authentication and accountability 	<ul style="list-style-type: none"> • AAA (including TACACS+) • Port Isolation • Secure web management through HTTPS with SSLv3/TLS1.0 • Secure Command Line Interface(CLI) management with SSHv1/SSHv2 • IP/Port/MAC based access control
OAM	<ul style="list-style-type: none"> • 802.3ah Ethernet Link OAM 	<ul style="list-style-type: none"> • Device Link Detect Protocol(DLDP)
Management	<ul style="list-style-type: none"> • Web-based GUI • Command Line Interface(CLI) through console port, telnet • SNMPv1/v2c/v3 • SNMP Trap/Inform • RMON (1,2,3,9 groups) • PPPoE Circuit ID • DHCP/BOOTP Client • DHCP Snooping 	<ul style="list-style-type: none"> • DHCP Option82 • DHCP Relay • 802.1ab LLDP/LLDP-MED • CPU Monitoring • Cable Diagnostics • Access Control • SNTP • System Log
IPv6 Support	<ul style="list-style-type: none"> • Dual IPv4/IPv6 stack • Multicast Listener Discovery (MLD) Snooping • IPv6 neighbor discovery (ND) 	<ul style="list-style-type: none"> • Path maximum transmission unit (MTU) discovery • ICMP version 6 • TCPv6/UDPv6
MIBs	<ul style="list-style-type: none"> • MIB II (RFC1213) • Interface MIB (RFC2233) • Ethernet Interface MIB (RFC1643) • Bridge MIB (RFC1493) • P/Q-Bridge MIB (RFC2674) • Remote Ping, Traceroute MIB (RFC2925) 	<ul style="list-style-type: none"> • RMON MIB (RFC2819) • RMON2 MIB (RFC2021) • Radius Accounting Client MIB (RFC2620) • Radius Authentication Client MIB (RFC2618)

Ordering Information

Host Switch	
Product Model	Description
T2500-28TC	24-Port 10/100Mbps and 4-Port Gigabit JetStream L2 Managed Switch with 4 Combo SFP Slots

SFP Modules	
Product Model	Description
TL-SM311LS	Gigabit SFP module, Single-mode, LC interface, Up to 10km distance
TL-SM311LM	Gigabit SFP module, Multi-mode, LC interface, Up to 550m distance
TL-SM321A	Gigabit WDM Bi-Directional SFP Module, single-mode, LC connector, TX:1550nm/RX:1310nm, 10km
TL-SM321B	Gigabit WDM Bi-Directional SFP Module, single-mode, LC connector, TX:1310nm/RX:1550nm, 10km

Router	
Product Model	Description
MC210CS	Gigabit single-mode SC SFP Transceiver, up to 15Km, chassis mountable
MC200CM	Gigabit multi-mode SC SFP Transceiver, up to 550m, chassis mountable
MC220L	Gigabit SFP slot supporting mini-GBIC modules, chassis mountable
MC1400	14-slot power supply chassis for TP-LINK Media Converter, 19-inch rack-mountable

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