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JetStream T3700 Series
L3 Managed Switches

MODEL: T3700G-52TQ Datasheet

Highlights

- Abundant Layer 3 routing protocols including RIP/OSPF/VRRP to support a scalable network

- True physical stacking technology supports up to 8 switches for scalability and efficient redundancy

-10 Gigabit Ethernet uplink ports ensure smooth data delivery for high-bandwidth applications

- 2 removable power units minimize downtime

- PIM-SM/PIM-DM/IGMP Snooping for reliably stable video quality

- RJ45/Micro-USB Console ports and an out-of-band management port provide a range of management options

- A USB 2.0 port makes it easy to import files and restore configurations.

Overview

TP-Link's JetStream T3700 series L3 managed switches are designed to form highly accessible, scalable and robust networks. With an extensive suite of routing protocols, 10Gbps wired speeds, physical stacking technology, diverse management features and an optional redundant external power unit, TP-Link's JetStream T3700 series provide a reliable, secure and cost-effective solution for enterprise, campus and ISP networks.

Advanced L3 Features

T3700 series switches support Layer 3 routing protocols that include Static Routing, RIP, OSPF and VRRP, helping to build scalable, reliable networks. Multicast routing protocols such as PIM-SM and PIM-DM guarantee efficient routing for multicast groups.

Physical Stacking Technology

The switches are equipped with 2 fixed and 2 optional 10G SFP+ ports which can be used for stacking. T3700G-52TQ supports up to 8 switches for network simplification, and up to 384 GE, 32 Gigabit combo SFP and 32 10G SFP+ ports per physical stack, providing up to 1408Gbps total switching capacity for the network. With all units identified by a simple IP address, the stack can be easily configured and monitored.

Rich Out-of-band management port

T3700 series switches provide 3 kinds of out-of-band management ports: RJ45 console ports, Micro-USB console ports and RJ45 out-of-band management ports. Micro-USB console ports are designed for those laptop computers which do not support the RS232 (DB9) interface. Customers can use a USB cable to manage switches through the CLI (command-line interface). The RJ45 out-of-band management port is used solely for web management, leaving the RJ45 ports free for data transmission.

Specifications

Hardware Features & Performance

Product Picture		
Model		T3700G-52TQ
General	Standard and Protocols	IEEE 802.3i 10BASE-T Ethernet IEEE 802.3u 100BASE-TX/FX IEEE 802.3ab 1000BASE-T IEEE 802.3z 1000BASE-X IEEE 802.3ae 10GBASE-SR/LR IEEE 802.3av GVRP IEEE 802.3x Flow control IEEE 802.3ad Link Aggregation IEEE 802.1v Protocol VLAN IEEE 802.1d Spanning Tree Protocol (STP) IEEE 802.1s Rapid Spanning Tree (RSTP) IEEE 802.1w Multiple Spanning Tree (MSTP) IEEE 802.1q VLANs / VLAN tagging IEEE 802.1x Network Login Security IEEE 802.1p QoS
	Network Media	10BASE-T: UTP category 3, 4, 5 cable (maximum 100m) 100BASE-TX/1000Base-T: UTP category 5, 5e or above cable (maximum 100m) 1000BASE-X: MMF, SMF 10GBASE-LR 10GBASE-SR
	Interfaces	48 10/100/1000Mbps RJ45 ports 4 combo Gigabit SFP Slots Up to 4 10G SFP+ Slots (2 fixed and 2 optional 10G SFP+ Slots) 1 RJ45 Console Port 1 Micro-USB Console Port 1 RJ45 out-of-band Management Port 1 USB 2.0 Storage Port
Performance	Switching Capacity	176Gbps
	Packet Forwarding Rate	130.9Mpps
	MAC Address Table	32K
	Packet Buffer	32Mbit
	Jumbo Frame	12KB
Physical & Environment	Power Supply	100-240V AC, 50/60Hz
	Maximum Power Consumption (220V/50Hz)	58.82W
	Dimensions (W × D × H)	17.3 × 16.5 × 1.7 in. (440 × 420 × 44 mm)
	Fan Quantity	1 removable fan module
	Operating Temperature	0°C~40°C (32°F~104°F)
	Storage Temperature	-40°C~70°C (-40°F~158°F)
	Operating Humidity	10%~90%RH, non-condensing
	Storage Humidity	5%~90%RH, non-condensing
	Certification	CE, FCC

Physical Stacking

Installable SFP+ Transceivers and Direct Attach Copper (DAC) Cables	TXM431-SR TXM431-LR TXC432-CU1M TXC432-CU3M
Max Number of Stacking Ports Installable	2 SFP+
Stacking Speed (Per Port)	20Gbps (Full-Duplex)
Number of Units Per Stack	8

Software Features

Stack	• Physical Stacking
	  - Up to 1408Gbps of Backplane when 8 units in the stack
	  - Up to 8 units per stack

L3 Features	• L3 Routing
	  - 128 IPv4 Interface entries
	  - 256 IPv4 Static Routing entries
	  - 8K IPv4 Dynamic Routing entries
	• RIP v1, v2
	• OSPF v1, v2
	• IGMP v1, v2, v3
	
	• Multicast Routing
	  - Static Multicast Route
	  - PIM-DM/SM
	• ARP Proxy
	• DHCP Server/Relay
	• VRRP

L2 Features	• Link Aggregation
	  - static link aggregation
	  - 802.3ad LACP
	  - Up to 64 aggregation groups, containing 8 ports per group
	• Spanning Tree Protocol
	  - 802.1D STP
	  - 802.1w RSTP
	  - 802.1s MSTP
	  - 32 MSTP Instance
	  - STP Security: Loop back detection, TC Protect, BPDU Filter/Protect, Root Protect
	
	• Loopback Detection
	• Flow Control
	  - 802.3x Flow Control
	• Port Mirroring
	  - One-to-One
	  - Many-to-One
	  - Flow-Based
	  - Tx/Rx/Both
	• LLDP, LLDP-MED

L2 Multicast	• 1024 IGMP groups
	• IGMP Snooping
	  - IGMP v1/v2/v3 Snooping
	  - IGMP Fast Leave
	  - MVR
	  - IGMP Snooping Querier
	  - Limited IP Multicast
	  - Static Multicast Forwarding
	
	• MLD Snooping
	  - MLD v1/v2 Snooping
	  - MLD Snooping Querier
	  - Fast Leave
	  - Limited IP Multicast
	  - Static Multicast Forwarding

VLAN	• VLAN Group - 4K VLAN Groups • 802.1Q tag VLAN • MAC VLAN • Protocol VLAN • VLAN VPN (QinQ) • GVRP • Private VLAN

QoS	• Class of Service
	  - Port Priority
	  - 802.1p CoS/DSCP priority
	  - 8 Priority Queues
	  - Queue Schedule Mode
	• Bandwidth Control
	  - Port/Flow based Rating Limiting
	  - Storm Control
	
	• DiffServ
	  - DiffServ Class
	  - DiffServ Policy
	  - DiffServ Service
	• Auto-VoIP
	• Voice VLAN

Physical Stacking

ACL	• Supports up to 3328 entries
	• MAC ACL
	  - Source MAC
	  - Destination MAC
	  - VLAN ID
	  - User Priority
	  - EtherType
	• Standard IP ACL
	  - Source IP
	  - Destination IP
	• Time based ACL
		• Extended IP ACL
		  - Source IP
		  - Destination IP
		  - Fragment
		  - IP Protocol
		  - TCP Flag
		  - TCP/UDP Port
		  - DSCP/IP TOS

Security	• AAA
	• DHCP Snooping
	• IP-MAC-Port Binding
	  - Up to 32768 entries
	• ARP Inspection
	  - Up to 32768 entries
	• IP Source Guard
	  - Up to 1020 entries
	• 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
	• DoS Defend
		• 802.1X
		  - Port based authentication
		  - MAC(Host) based authentication
		  - Guest VLAN
		  - Support Radius authentication and accountability
		• Port Isolation
		• MAC Filtering
		• 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 port, telnet • SNMPv1/v2c/v3 • SNMP Trap/Inform • RMON (1,2,3,9 groups) • DHCP Option82	• CPU Monitoring • Cable Diagnostics • Access Control • SNTP • System Log • Dual Image • IPv6 Management • PPPoE Circuit ID • HTTP/TFTP File Transfer
MIBs	• MIB II (RFC1213) • Interface MIB (RFC2233) • Ethernet Interface MIB (RFC1643) • Bridge MIB (RFC1493) • P/Q-Bridge MIB (RFC2674) • RMON MIB (RFC2819)	• RMON2 MIB (RFC2021) • Radius Accounting Client MIB (RFC2620) • Radius Authentication Client MIB (RFC2618) • Remote Ping, Traceroute MIB (RFC2925) • Support TP-Link private MIBs

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