



# TP-LINK JetStream

# JetStream 28-Port Gigabit Stackable L3 Managed Switch

# **Overview**

TP-LINK's T3700G-28TQ is an L3 managed switch designed to build a highly accessible, scalable, and robust network. The switch is equipped with 24 Gigabit RJ-45 ports, 4 Combo Gigabit SFP and up to 4 10Gbps SFP slots, giving network administrators great network flexibility. It supports abundant Layer 3 routing protocols such as RIP and OSPF which are a critical part in the creation of fully resilient scalable networks. What's more, with physical stacking feature and optional redundant external power unit, T3700G-28TQ provides a robust network with efficient redundancy. T3700G-28TQ provides robust security to help secure your enterprise network.

TP-LINK's T3700G-28TQ L3 managed switch provides a reliable and cost-effective solution for enterprise, campus and ISP networks.

# Specifications

# Hardware Features & Performance

Product Picture	
Model	T3700G-28TQ
Hardware Features	
Standards and Protocols	IEEE 802.3i, IEEE 802.3u, IEEE 802.3ab, IEEE802.3z, IEEE 802.3ae, IEEE 802.3ad, IEEE 802.3x, IEEE 802.1d, IEEE 802.1s, IEEE 802.1w, IEEE 802.1q, IEEE 802.1x, IEEE 802.1p
Interfaces	24 10/100/1000Mbps RJ45 Ports (Auto Negotiation/Auto MDI/MDIX) 4 combo gigabit SFP Slots Up to 4 10G SFP+ Slots (2 fixed and 2 optional 10G SFP+ Slots) 1 Console Port
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) 100BASE-FX: MMF, SMF 1000BASE-X: MMF, SMF 10GBASE-LR 10GBASE-SR
Dimensions ( W x D x H )	17.32*13*1.73 in. (440*330*44 mm)
Fan Quantity	4
Power Consumption	63W (220V/50Hz) max
Power Supply	100-240V AC, 50/60Hz
Certifications	CE, FCC, RoHS
Environment	Operating Temperature: 0 $\degree$ ~40 $\degree$ (32 $\degree$ ~104 $\degree$ ); Storage Temperature: -40 $\degree$ ~70 $\degree$ (-40 $\degree$ ~158 $\degree$ ) Operating Humidity: 10%~90% non-condensing; Storage Humidity: 5%~90% non-condensing
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)	20 Gbps (Full-Duplex)
Number of Units Per Stack	8
Performance	
Switching Capacity	Up to 128Gbps for a standalone switch
Packet Forwarding Rate	Up to 95.2Mpps for a standalone switch
Backplane	Up to 320Gbps when 8 units in the stack
Packet Buffer	2 MB
MAC Address Table	32K
Number of Routes	12K
Number of Static Routes	256
Number of IP Interfaces	128
Jumbo Frame	10240 Bytes

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### Software Features

# Stackability

- Physical Stacking
  - Up to 320Gbps of Backplane when 8 units in the stack
  - Up to 8 units per Stack
- Virtual Stacking
  - Single IP Management(Cluster)
  - Up to 32 units per Virtual Stack

# L3 Routing Features

#### L3 Routing

- Up to 12K entries (all route entries combined)
- Up to 12K dynamic route entries
- Up to 256 static route entries
- Up to 128 IP Interfaces

#### L3 Forwarding

- Up to 8K entries (all L3 Hardware Forwarding Entries Combined)
- RIP v1, v2
- OSPF
  - OSPF v2
  - OSPF Passive Interface
  - OSPF NSSA (Not So Stubby Area)
  - OSPF Equal Cost Route
- IGMP v1,v2,v3
- Multicast Routing
  - Static Multicast Route
  - PIM-DM/SM
  - PIM SSM
- ARP Proxy
- Gratuitous ARP
- DHCP Server/Relay
- VRRP

# L2 Switching Features

- Link Aggregation
  - Support static link aggregation
  - Support 802.3ad LACP
  - Up to 32 aggregation groups, containing 8 ports per group

- Spanning Tree Protocol(STP)
  - IEEE 802.1D Spanning Tree Protocol
  - IEEE 802.1s Multiple Spanning Tree Protocol
  - IEEE 802.1w Rapid Spanning Tree Protocol
  - STP Security: Loop back detection, TC Protect, BPDU Filter/Protect, Root Protect
- Multicast
  - Support IGMP Snooping V1/V2/V3, up to 1K groups
  - Support multicast VLANs, IGMP Immediate Leave, Unknown IGMP Throttling, IGMP Filtering, Static Multicast IP
- VLAN
  - Support IEEE802.1Q with 4K VLAN groups and 4K VIDs
  - Support Port VLAN, Protocol VLAN, and Private VLAN
  - Support GARP/GVRP feature
- IEEE 802.3x flow control for Full Duplex mode and backpressure for Half Duplex mode
- LLDP

# Quality of Service (QoS)

- Support 802.1p CoS/DSCP priority
- Support 8 priority queues
- Queue scheduling: SP, WRR, SP+WRR
- Port/Flow- based Rate Limiting
- Voice VLAN assure voice applications much smoother performance

# **Advanced Security Strategies**

- IP-MAC-Port-VID Binding
- Static/Dynamic Port Security (MAC-based)
- DoS defend feature
- Dynamic ARP Inspection
- 802.1x authentication
  - Support 802.1x port/MAC based authentication
    Support Radius authentication and accountability
  - Guest VLAN
- Access Control List (ACL)
  - L2~L4 package \_Itering based on source and destination MAC address, IP address, TCP/UDP

\* Released in future.

ports, 802.1p, DSCP, protocol and VLAN ID – Time based ACL

- Support Broadcast, Multicast and Unknown unicast Storm Control
- Secure web management through HTTPS and
- SSLv2/v3/TLSv1
- Secure remote command line interface(CLI) management with SSH v1/V2

#### Management

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- Support Web-based GUI management mode
- Support Command Line Interface(CLI) through
- console port, telnet management mode
- SNMP v1/v2c/v3
- RMON (1, 2, 3, 9 groups)
- DHCP/BOOTP Client
- DHCP Snooping
- DHCP Server/Relay
- DHCP Option 82
- CPU Monitoring
- Port Mirroring (Many to One)
- Cable Diagnostics feature
- Ping/Tracert feature
- SNTP
- Integrated NDP/NTDP feature
- System Log
- Dual Image

#### **Ethernet Protocols**

- IEEE 802.3i 10BASE-T
- 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 802.3ad Link Aggregation
- IEEE 802.3x Flow control
- IEEE 802.1p QoS
- IEEE 802.1q VLANs / VLAN tagging
- IEEE 802.1v Protocol VLAN
- IEEE 802.1d Spanning Tree Protocol (STP)
- IEEE 802.1s Multiple Spanning Tree (MSTP)
- IEEE 802.1w Rapid Spanning Tree (RSTP)
- IEEE 802.1x Network Login Security

#### 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

# Ordering Information

Host Switch	
Product Model	Description
T3700G-28TQ	JetStream 28-Port Gigabit Stackable L3 Managed Switch
Auxiliary Products	
Product Model	Description
TX432	10-Gigabit 2-Port SFP + Module
TXM431-SR	10GBase-SR SFP+ LC Transceiver
TXM431-LR	10GBase-LR SFP+ LC Transceiver
TXC432-CU1M	1M Direct Attach SFP+ Cable
TXC432-CU3M	3M Direct Attach SFP+ Cable
RPS150	150W Redundant Power Supply
RPS2	Dual Bay Rackmountable RPS Shelf
PSM150-AC	150W AC Power Supply Modul
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