



# TP-LINK **JetStream**

## JetStream 28-Port Gigabit Stackable L2+ Managed Switch

T2700G-28TQ

### ■ Overview


TP-LINK's T2700G-28TQ is an L2+ 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 administrator great network flexibility. It supports basic Layer3 features like static routing and RIP v1/v2 by default and can be upgraded to support abundant Layer 3 features such as OSPF/ECMP/PIM/VRRP with the addition of a Layer3 license. What's more, with physical stacking feature and optional redundant external power unit, T2700G-28TQ provides a robust network with efficient redundancy. T2700G-28TQ provides robust security to help secure your enterprise network.

TP-LINK's T2700G-28TQ L2+ managed switch provides a reliable and cost-effective solution for enterprise, campus and ISP networks.

Please contact with TP-LINK's authorized distributor to purchase the license key if (T2700G-28TQ-L1000) needed and then go to T2700G-28TQ page at TP-LINK website to download the license with the license key.

## Specifications

### Hardware Features & Performance

<b>Product Picture</b>	
<b>Model</b>	T2700G-28TQ
<b>Hardware Features</b>	
<b>Standards and Protocols</b>	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
<b>Interfaces</b>	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
<b>Network Media</b>	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
<b>Dimensions (W x D x H)</b>	17.32*13*1.73 in. (440*330*44 mm)
<b>Fan Quantity</b>	4
<b>Power Consumption</b>	63W (220V/50Hz) max
<b>Power Supply</b>	100-240V AC, 50/60Hz
<b>Certifications</b>	CE, FCC, RoHS
<b>Environment</b>	Operating Temperature: 0 °C ~40 °C (32 °F ~104 °F); Storage Temperature: -40 °C ~70 °C (-40 °F ~158 °F) Operating Humidity: 10%~90% non-condensing; Storage Humidity: 5%~90% non-condensing
<b>Physical Stacking</b>	
<b>Installable SFP+ Transceivers and Direct Attach Copper (DAC) Cables</b>	TXM431-SR TXM431-LR TXC432-CU1M TXC432-CU3M
<b>Max Number of Stacking Ports Installable</b>	2 SFP+
<b>Stacking Speed (Per Port)</b>	20 Gbps (Full-Duplex)
<b>Number of Units Per Stack</b>	8
<b>Performance</b>	
<b>Switching Capacity</b>	Up to 128Gbps for a standalone switch
<b>Packet Forwarding Rate</b>	Up to 95.2Mpps for a standalone switch
<b>Backplane</b>	Up to 320Gbps when 8 units in the stack
<b>Packet Buffer</b>	2 MB
<b>MAC Address Table</b>	32K
<b>Number of Routes</b>	12K
<b>Number of Static Routes</b>	256
<b>Number of IP Interfaces</b>	128
<b>Jumbo Frame</b>	10240 Bytes

## 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

### Basic 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**
- **DHCP Server/Relay**

### Advanced L3 Routing Features (License required)

- **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**
- **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 filtering based on source and destination MAC address, IP address, TCP/UDP 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

- **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

<b>Host Switch</b>	
Product Model	Description
T2700G-28TQ	JetStream 28-Port Gigabit Stackable L2+ Managed Switch
<b>Auxiliary Products</b>	
Product Model	Description
T2700G-28TQ-L1000	T2700G-28TQ Layer 3 License Upgrade
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
<b>SFP Modules</b>	
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