

TP-SG6428X

TP-Link SG6428X Omada 24 Port Gigabit stackable L3 Managed Switch with 4x10G slots

Product Overview

TP-Link SG6428X Omada 24 Port Gigabit stackable L3 Managed Switch with 4x 10G slots, 24x Gigabit RJ45 Ports, 4x 10G SFP+ slots, 2x USB 2.0 Ports, Four internal fixed fans, Two internal fixed Power Supply modules, Rackmountable



Specifications

Overview Summary:

The TP-Link SG6428X is a high-performance 24-port Gigabit Layer 3 managed switch built for reliable business, enterprise and ISP networking. With four 10G SFP+ slots, physical stacking, advanced routing and redundant internal power supplies, it provides the capacity and resilience needed for demanding network environments. Centralised Omada SDN management also simplifies deployment and administration.

Ideal for upgrading or expanding a scalable wired network, the SG6428X delivers strong connectivity, security and management capabilities in a rackmount design. Buy now for dependable high-speed network infrastructure, or shop now to equip your organisation with a powerful managed switching solution.

Performance tier:High-end enterprise

Uses:Enterprise networking, business networks, network aggregation, Layer 3 routing, high-speed uplinks, network stacking, ISP infrastructure, centralised network management

Overview:

The TP-Link SG6428X Omada 24-Port Gigabit Stackable L3 Managed Switch is designed for businesses, enterprise networks and service providers that need high-speed connectivity, Layer 3 routing, physical stacking and dependable network availability. With 24 Gigabit RJ45 ports and four 10G SFP+ slots, it provides flexible connectivity for servers, workstations, access points, uplinks and other network equipment.

Description:

The TP-Link SG6428X combines high-performance switching with advanced Layer 3 networking, security and centralized Omada management. Its physical stacking capability allows multiple switches to operate as a unified network system, while redundant internal power supplies and advanced availability technologies help reduce the impact of hardware or network failures. The four 10G SFP+ slots also provide fast uplink options for demanding network environments.

Features:

High-Speed Gigabit and 10G Connectivity

With 24 Gigabit Ethernet ports and four 10 Gbps SFP+ slots, the SG6428X provides a practical combination of access and high-speed uplink connectivity. The switch delivers up to 128 Gbps of switching capacity per unit, making it suitable for environments with significant internal network traffic.

Physical stacking supports up to four units, increasing the combined switching capacity to as much as 512 Gbps while providing greater redundancy and network scalability.

Key connectivity points include:

- 24x Gigabit RJ45 Ethernet ports
- 4x 10 Gbps SFP+ slots
- Up to 128 Gbps switching capacity per switch
- Up to four units supported in a physical stack
- Up to 512 Gbps switching capacity across a four-unit stack
- Rackmountable design for server rooms and network cabinets

Layer 3 Routing for Scalable Networks

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The SG6428X is built for networks that require more than basic Layer 2 switching. Its Layer 3 capabilities support a range of routing protocols and functions, allowing network administrators to build scalable and efficient network architectures.

Supported routing and network functions include:

- Static Routing
- RIP
- OSPF
- ECMP
- VRRP
- DHCP Server
- DHCP Relay
- PIM-DM multicast routing

PIM-DM helps manage multicast traffic efficiently, while VRRP can provide gateway redundancy for improved network availability.

Reliable Network Availability

For business-critical environments, the SG6428X includes several technologies designed to improve network resilience. Two internal fixed power supply modules provide power redundancy, while VRRP supports gateway redundancy. ERPS provides rapid protection and recovery for supported ring network topologies.

This combination makes the switch well suited to networks where connectivity needs to remain available during equipment or link failures.

Advanced Network Security

Network security controls help administrators manage access and protect the network against common threats. The SG6428X supports security mechanisms for both IPv4 and IPv6 environments, giving network administrators greater control over connected devices and traffic.

Security capabilities include:

- IPv4 and IPv6 ACL support
- Dynamic ARP Inspection
- IEEE 802.1X authentication
- MAC Authentication Bypass (MAB)
- Port Security
- DoS Defend
- Secure Shell (SSH)

These controls can be used to restrict unauthorized access, authenticate network devices and reduce the risk of malicious or unwanted traffic.

Centralized Omada SDN Management

The SG6428X integrates with the TP-Link Omada Software Defined Networking platform, allowing compatible network devices such as switches, routers and access points to be managed from a centralized interface. Cloud-based management can simplify administration across larger networks and supports Zero-Touch Provisioning (ZTP) for supported deployment scenarios.

Administrators can also manage the switch directly through its web-based graphical interface or through a Command Line Interface. SSL and SSH encryption help protect management traffic.

Flexible Network Management

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For organizations that require traditional network management tools, the SG6428X supports SNMP v1, v2c and v3 as well as RMON. These options allow network administrators to monitor switch status, collect network information and receive notifications when abnormal events occur.

Management options include:

- Omada centralized cloud management
- Web-based GUI
- Command Line Interface (CLI)
- SNMP v1/v2c/v3
- RMON
- SSL and SSH encrypted management
- Zero-Touch Provisioning support

Designed for Business and Enterprise Networks

The TP-Link SG6428X is a strong choice for SMBs, enterprises, ISPs and other organizations that need a scalable managed network switch with 10G uplinks and Layer 3 routing. Its combination of Gigabit access ports, 10G SFP+ connectivity, physical stacking, redundant power and advanced management makes it suitable for core and convergence network deployments.

The unit also includes four internal fixed fans and two internal fixed power supply modules, providing an integrated hardware design for rack-mounted network installations.

TP-Link SG6428X Key Details

- Model: TP-Link SG6428X Omada
- Part Number / SKU: TP-SG6428X
- Switch type: Stackable Layer 3 Managed Switch
- Ethernet ports: 24x Gigabit RJ45
- Uplink ports: 4x 10 Gbps SFP+
- Switching capacity: 128 Gbps per unit
- Physical stacking: Up to 4 units
- Maximum stacked switching capacity: 512 Gbps
- USB ports: 2x USB 2.0
- Power supplies: 2x internal fixed modules
- Cooling: 4x internal fixed fans
- Installation: Rackmountable
- Management: Omada SDN, Web GUI, CLI, SNMP and RMON

Suitable Applications

The SG6428X can be used in business networks, enterprise network infrastructure, server rooms, data centres, ISP environments and other installations requiring reliable Gigabit access and 10G uplink performance. Its Layer 3 routing and stacking capabilities also make it suitable for growing networks where additional capacity and redundancy may be required.

For organizations looking for a TP-Link Omada managed switch with 24 Gigabit ports, four 10G SFP+ slots, Layer 3 routing and physical stacking, the SG6428X provides a comprehensive platform for building a high-performance and scalable network.

Specifications:

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Specifications	
Product Code	TP-SG6428X
HARDWARE FEATURES	
Interface	24 x 10/100/1000 Mbps RJ45 Ports
	4 x 10G SFP+ Slots
	2 x USB 2.0 Ports
	1 x RJ45 Console Port
	1 x USB Type-C Console Port
	1 x RJ45 Management Port
Fan Quantity	Four Internal Fixed Fans
Power Supply	Two Internal Fixed Power Supply Modules (100-240 VAC, 50/60 Hz)
Dimensions (W x D x H)	17.3 x 15.0 x 1.7 in (440 x 380 x 44 mm)
Mounting	Rackmountable
Max Power Consumption	28.4 W (220 V/50 Hz)
Max Heat Dissipation	96.91 BTU/hr (220 V/50 Hz)
PERFORMANCE	
Switching Capacity	128 Gbps per Unit
Stacking	Stacking Number: 4
	Stacking Port: 10G SFP+ Slot (all uplink ports can be used as stacking ports)
	Stack Bandwidth: 20 Gbps Per Port (Full-Duplex)
Packet Forwarding Rate	95.2 Mpps
MAC Address Table	32 K
Packet Buffer Memory	3 MB
Jumbo Frame	9 KB
SOFTWARE FEATURES	

Quality of Service	Class of Service
	- 8 Queues of Priority
	- Port Priority
	- IEEE 802.1p Priority
	- DSCP Priority
	- Queue Min-Bandwidth
	- Schedule Mode (SP, WRR, SP+WRR)
	Bandwidth Control
	- Rate Limit
	- Storm Control
	Voice VLAN
	User-Defined OUI
	Smoother Performance
	Action for Flows
	- QoS remark (802.1P Remark, DSCP Remark)
L3 Features	IP Interfaces:
	- IPv4: Max 256, IPv6: Max 256
	Static Routing
	- Max 1,024, IPv6: Max 512
	Host Route Table: Max 6,100 entries
	RIP: Version v1/v2, Max 8,190
	OSPF: Version v2/v3 , v2: Max 8,190, v3: Max 4,097
	VRRP: Version v2/v3, Max 64 groups
	ECMP: 256 entries, max 32 ECMP Nexthops per Destination
	Static ARP: 512 static entries
	Dynamic ARP: 7,680 dynamic entries
	Proxy ARP
	DHCP Server:
	- Max 8K IP Pools
	- Max 1,000 Manual Binding Entries
	DHCP Relay:
	- Relayed Interface
	- Relayed VLAN

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L2 and L2+ Features	Link Aggregation
	Spanning Tree Protocol
	Port-based and VLAN-based Loopback Detection
	802.3x Flow Control
	Supports 2,048 IGMP groups
	ERPS
	Mirroring
	RSPAN
	MAC Address Table
	PIM-DM (IPv4)
	Multicast
	- IGMP Snooping
	- MLD Snooping
	- L2 Multicast Table
	- Fast Leave
	- Multicast VLAN Registration (MVR)
	- Static Multicast IP
	- Multicast Filtering
Advanced Features	Automatic Device Discovery
	Batch Configuration
	Batch Firmware Upgrading
	Intelligent Network Monitoring
	Abnormal Event Warnings
	Unified Configuration
	Reboot Schedule
	ISP Features:
	802.3ah Ethernet Link OAM
	L2PT (Layer 2 Protocol Tunneling)
	Device Link Detect Protocol (DLDP)
	DDM
	sFlow

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VLAN	Max 4K VLAN Group (802.1q VLAN)
	802.1Q Tagged VLAN
	MAC VLAN Entries: 200
	Multicast VLAN
	Management VLAN
	VLAN VPN (QinQ): Max 256 entries
	GVRP
	Protocol VLAN: Protocol Template 16, Protocol VLAN 12 entries
	VLAN VPN
	Voice VLAN
	Private VLAN

Security	Port Isolation
	CPU-Defend
	ARP Inspection (Dynamic ARP Inspection)
	DoS Defend
	IP-MAC-Port Binding
	-1,024 Entries
	- DHCP Snooping
	- ARP Inspection
	- IPv4 Source Guard
	IPv6-MAC
	-Port Binding
	-1,024 Entries
	- DHCPv6 Snooping
	- ND Detection
	- ND Snooping
	- IPv6 Source Guard
	DHCP Filter
	Static/Dynamic Port Security
	- Up to 64 MAC addresses per port
	Broadcast/Multicast/Unknown-unicast Storm Control
	- kbps/ratio control mode
	802.1X
	- Port base authentication
	- Mac base authentication
	- VLAN Assignment
	- MAB
	- Guest VLAN
	- RADIUS authentication and accountability support
	AAA (including TACACS+)
	Secure web management through HTTPS with SSLv3/TLS 1.2
	Secure Command Line Interface (CLI) management with SSHv2
	IP/Port/MAC-based access control
MANAGEMENT	
Omada App	Yes. Requiring the use of the Omada Hardware Controller, Omada Cloud-Based Controller, or Omada Software Controller.

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Centralized Management	Omada Cloud-Based Controller
	Omada Hardware Controller
	Omada Software Controller
Cloud Access	Yes. Requiring the use of the Omada Hardware Controller, Omada Cloud-Based Controller, or Omada Software Controller.
Zero-Touch Provisioning	Yes. Requiring the use of the Omada Cloud-Based Controller.
Management Features	Web-based GUI
	Command Line Interface (CLI) through console port, telnet
	SNMPv1/v2c/v3
	- Trap/Inform
	- RMON (1, 2, 3, 9 groups)
	SDM Template
	DHCP/BOOTP Client
	802.1ab LLDP/LLDP-MED
	DHCP Auto Install
	Dual Image, Dual Configuration
	CPU Monitoring
	Cable Diagnostics
	Password Recovery
	SNTP
	System Log
	EEE
OTHERS	
Package Contents	SG6428X Switch
	2 x Power Cords
	RJ45 Console Cable
	Quick Installation Guide
	Rackmount Kit
	Rubber Feet
System Requirements	Microsoft Windows 98SE, NT, 2000, XP, Vista or Windows 7 / 8 / 10 / 11, MAC OS, NetWare , UNIX or Linux.
Environment	Operating Temperature: 0-45 degreesC (32-113 degreesF)
	Storage Temperature: -40-70 degreesC (-40-158 degreesF)
	Operating Humidity: 10-90% RH non-condensing
	Storage Humidity: 5-90% RH non-condensing

Product Information Online

For the latest product information, availability and purchasing details, please visit the product page:

Product page:

<https://www.comx-computers.co.za/TP-SG6428X-TP-Link-SG6428X-Omada-24-Port-Gigabit-stackable-Buy-p-339934.php>

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