S4806TGL3

54 Port L3 10G Uplink Core Routing Switch

OVERVIEW

S4806TGL3 is a high-performance L3 managed switch, which is a new generation convergence 10G switch for next-generation IP metropolitan area networks, large-scale campus networks, and enterprise networks. It has **48*10/100/1000M RJ45** ports and **6*1/10G SFP+** fiber ports.

S4806TGL3 is equipped with complete L3 management functions, with comprehensive protocols and applications. On the basis of providing high-performance L2/L3/L4 wire-speed switching service deployment and management, it further integrates IPv6, MPLS VPN, and network Multiple network services such as security, traffic analysis, virtualization, etc., combined with multiple data center high-reliability technologies such as uninterrupted upgrades, uninterrupted forwarding, graceful restart, redundancy protection, etc., to ensure the longest uninterrupted communication capability of the network. The switch supports advanced functions such as RIP, OSPF, BGP, PIM-DM/SM, and is ideal for traditional or fully virtualized big data transmission. Network application managers can flexibly choose the appropriate optical fiber connection according to the transmission distance or required transmission speed, effectively expanding the 1G/10G network. In addition, **S4806TGL3** has a switching capacity of up to **598Gbps**, 6*1/10G uplink SFP+ fiber ports, greatly increasing the network bandwidth converged to the core, meeting the high bandwidth requirements of users' voice, video, and data triple play, suitable for application requirements for smart campuses, large smart communities, smart cities, smart transportation, and other fields.

FEATURES

- **Advanced hardware architecture, powerful processing capabilities**
  - Adopting the industry's advanced hardware architecture design, the 1U machine can support 48*100/1000M RJ45 ports and 6*1/10G SFP+ ports, meeting the high performance, high capacity, and high density of big data transmission and expandable requirements.

- **Strong data service guarantee**
  - Support virtualized reorganization switching technology, which can virtualize multiple physical devices into one logical device. The actual physical device is transparent to users, which simplifies the management of network equipment and network topology, greatly improves network operation efficiency, and The entire virtual system realizes unified management of a single IP, and the actual physical equipment is transparent to users, which simplifies the management of network equipment and network topology, greatly improves network operation efficiency, and effectively reduces operation and maintenance costs.
  - Based on the HPS (Uninterrupted Protection System) uninterrupted protection system, the key power system adopts repeated design, can be hot-swappable, and supports seamless switching in the event of a failure without interrupting business.
  - Support STP/RSTP/MSTP protocol, support VRRP protocol, and support ring network protection, dual-uplink active/standby connection protection, LACP aggregation, and other simple and efficient redundancy protection mechanisms.

- Support ISSU (software upgrade in service) business uninterrupted system upgrades to ensure uninterrupted forwarding of user data during system upgrade and master control switching.
- Super-advanced BFD two-way interconnection detection mechanism, through the linkage with the second and third layer protocols, realizes dozens of levels of fault detection and business recovery, which greatly improves the reliability of the network system.
- Perfect Ethernet OAM mechanism, supporting 802.3ah, 802.1ag, and ITU-Y.1731, real-time monitoring of the network operating status, to achieve rapid detection and location of faults.

❖ **Rich business features**

- Complete Layer 2 and Layer 3 multicast routing protocols to meet the access requirements of IPTV, multi-terminal HD video surveillance, and HD video conferences;
- A complete three-layer routing protocol and large routing table capacity can meet various types of network interconnection requirements and can form large data center networks, campus networks, enterprise networks, and industrial user private networks.
- fully supports Layer 2 and Layer 3 MPLS VPN and can build a large-scale MPLS VPN core network to meet the access needs of industry private network VPN users and enterprise network VPN users.
- Fully support IPv6 protocol suite, support IPv6 neighbor discovery, ICMPv6, Path MTU discovery, DHCPv6, and other IPv6 features.
- Support IPv6-based Ping, Traceroute, Telnet, SSH, ACL, etc., to meet the needs of pure IPv6 network equipment management and business control.
- Support IPv6 multicast features such as MLD and MLD Snooping, and IPv6 three-layer routing protocols such as IPv6 static routing, RIPng, OSPFv3, BGP4+, etc., to provide users with complete IPv6 two- and three-layer solutions.
- Support rich IPv4 to IPv6 transition technologies, including IPv6 manual tunnel, automatic tunnel, 6to4 tunnel, ISATAP tunnel, and other tunnel technologies to ensure the smooth transition from IPv4 network to IPv6 network

❖ **Security**

- It adopts advanced hardware architecture design, realizing the hierarchical scheduling and protection of the packet. supports defense against DoS, TCP's SYN Flood, UDP Flood, broadcast storm, large traffic, etc. attacks on equipment; supports command line classification Protection, users of different levels have different management rights.
- Support IEEE 802.1x, Radius, BDTacacs+, etc., and provide users with a complete security authentication mechanism.
- Support clear text or MD5 authentication of related routing protocols, support uRPF reverse routing search technology, which can effectively control illegal services; hardware-level message deep detection and filtering technology, support for control messages and data messages In-depth detection, thereby effectively isolating illegal data packets, and improving the security of the network system.

❖ **Stable and reliable**

- Supports Efficient Ethernet and complies with International standard IEEE 802.3az.
- Smart fan design supports switching between front-back mode and back -front mode and fan automatic speed regulation.
- It adopts an advanced redundant dual power supply system architecture design which can realize the function of efficient power switching, unique power monitoring, slow start, real-time monitoring of the whole machine operating status, intelligent adjustment, and deep energy-saving.

❖ **Easy maintenance**

- CPU monitoring, memory monitoring, Ping test, and cable diagnose.
- HTTPS, SSLV3, SSHV1 / V2, and other encryption methods make management more secure.
- RMON, system logs, and port traffic statistics facilitate network optimization and reconstruction.
- LLDP can facilitate the network management system to query and determine the communication status of the link.
- Web network management, CLI command line (Console, Telnet), SNMP (V1/V2 /V3), Telnet, and other diversified management and maintenance methods.

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TECHNICAL SPECIFICATION

XENTINO S4806TGL3	
Interface Characteristics	
Fixed Port	48*10/100/1000M RJ45 ports (Data) 6*1/10G SFP+ fiber ports(Data) 1* Console RS232 port (9600,8,N,1)
Ethernet Port	10/100/1000Base-T auto-sensing, Full/half duplex MDI/MDI-X self-adaption
Twisted Pair Transmission	10BASE-T: Cat3,4,5 UTP(≤100 meter) 100BASE-TX: Cat5 or later UTP(≤100 meter) 1000BASE-T: Cat5e or later UTP(≤100 meter)
Optical Fiber Port	1/10G SFP+ optical fiber interface, default matching optical modules (optional order single-mode / multi-mode, single fiber / dual fiber optical module. LC)
Optical Cable/Distance	Multi-mode: 850nm / 0 ~ 500m, single mode: 1310nm/ 0 ~ 40km, 1550nm/ 0 ~ 120km.
Chip Parameter	
Network Management Type	L3
Network Protocol	IEEE802.3u 100Base-TX , IEEE802.3ab 1000Base-T IEEE802.3z 1000Base-X, IEEE802.3ae 10Gb/s Ethernet, IEEE802.3x
Forwarding Mode	Store and Forward(Full Wire Speed)
Switching Capacity	598Gbps (Non-blocking)
Forwarding Rate	160Mpps (@64byte)
MAC	32K
Buffer Memory	32M
Jumbo Frame	9K
LED Indicator	Power: PWR (green), system: SYS (green), network:1-48 (green), Fiber port: 1-6 (green)
PoE & Power Supply	
Total PWR / Input Voltage	75W/ (AC100-240V)
Power Consumption	Standby<30W,Full Load<50W
Power Supply	Built-in power supply AC100~240V 50-60Hz 1A
Physical Parameter	
Operation TEMP / Humidity	-20~+55°C, 5%~90% RH Non condensing
Storage TEMP / Humidity	-40~+75°C, 5%~95% RH Non condensing
Dimension	442.5*350*44.5mm (L*W*H)
Net /Gross Weight	<6.0kg / <6.3kg
Form Factor	Desktop, 19 inch 1U cabinet
Certification & Warranty	
Lightning Protection / Protection Level	Port lightning protection: 6KV 8/20us, Protection level: IP30
Certification	CCC, CE mark, commercial, CE/LVD EN60950 FCC Part 15 Class B, RoHS
Warranty	2 years, lifelong maintenance.
Network Management Features	

Virtualization and Stacking	Virtualization Distributed equipment management, distributed link aggregation, distributed flexible routing Stacking via standard Ethernet interface Local stacking and remote stacking MAD stack split detection based on LACP, BFD, ARP
IPv4	PBR, ECMP BFD for OSPF, BGP Static routing, RIP v1/v2, OSPF, BGP,IS-IS,BEIGRP
IPv6	MLD V1/V2, MLD snooping ICMPv6, DHCPv6, ACLv6 and IPv6 Telnet IPv6 Static Routing, RIPng, OSPFv3, BGP4+ Manual tunnel, ISATAP tunnel, 6 to 4 tunnel IPv6 neighbor discovery, Path MTU Discovery
MAC Switching Capacity	Black-hole MAC items IEEE 802.1AE MacSec MAC address filtering function Check and delete MAC address Configuring MAC address aging time Limit on MAC address learning number Static configuration and dynamically learning of MAC address
VLAN	GVRP, Private VLAN 4K Active VLAN QinQ & selective QinQ 1:1 and N:1 VLAN Mapping
Link Aggregation	10GE port aggregation, Static aggregation, Dynamic aggregation
Flow Monitoring	sFLOW
DHCP	DHCP server/relay/client/snooping DHCP auto-config and CWMP-TR069 DHCP Snooping option82/DHCP Relay option82
STP/ERPS	ERPS (G.8032) 802.1D (STP), 802.1W (RSTP),802.1S (MSTP) BPDU protection, root protection and ring protection
Multicast	IGMP V1/v2/v3 IGMP Snooping IGMP Fast Leave PIM-SM and PIM-DM Multicast traffic cross VLAN duplication Multicast group policy and multicast number limit
ARP	Free ARP, Static entry, ARP anti-attack Standard proxy ARP and local proxy ARP Dynamic ARP Inspection, ARP source suppression ARP inspection (check according to DHCP Snooping, 802.1x table entry, or IP/MAC static binding)
Mirroring	Flow mirroring, N:4 port mirroring, Local and remote port mirroring
MPLS VPN	MCE MPLS TE MPLS OAM LDP protocol P/PE of MPLS VPN

QoS/ACL	CAR flow limit Tail-Drop and WRED 802.1p/DSCP priority mapping Traffic policing and traffic shaping DRR, SP, and DRR+SP queue scheduling algorithms Hash load balancing to ensure the integrity of the traffic output session Traffic classification based on each field of the L2/L3/L4 protocol header Ingress and Egress ACL, matching L2, L3, L4, and IP quintuple, copy, forward, and discard
Security	uRPF Port isolation Radius and BDTacacs+ IEEE 8021x certification DHCP Snooping, DHCP Option 82 Command line hierarchical protection Port security, IP + MAC + port binding
Reliability	ISSU EAPS, ERPS HSRP, VRRP GR for OSPF and BGP BFD for OSPF and BGP Power supply 1+1 backup Static/LACP link aggregation and cross service card link aggregation
Management	NTP ISSU Track System logs Ping, Tracert Power alarm Graded alarm SNMP v1/v2/v3 RMON event history 802.1AG and 802.3AH Fan, temperature alarm Console, Telnet, SSH 2.0 Debug information output Web browser management Telnet remote maintenance ZTP (Zero Touch Provisioning) sFLOW and other traffic statistics analysis SNMP (Simple Network Management Protocol) File upload and download management in TFTP mode
Energy Saving	IEEE802.3az green energy Ethernet
System	Category 5 Ethernet network cable Web browser: Mozilla Firefox 2.5 or higher, Google browser chrome V42 or higher, Microsoft Internet Explorer10 or higher TCP/IP, network adapter, and network operating system (such as Microsoft Windows, Linux, or Mac OS X) installed on each computer in a network

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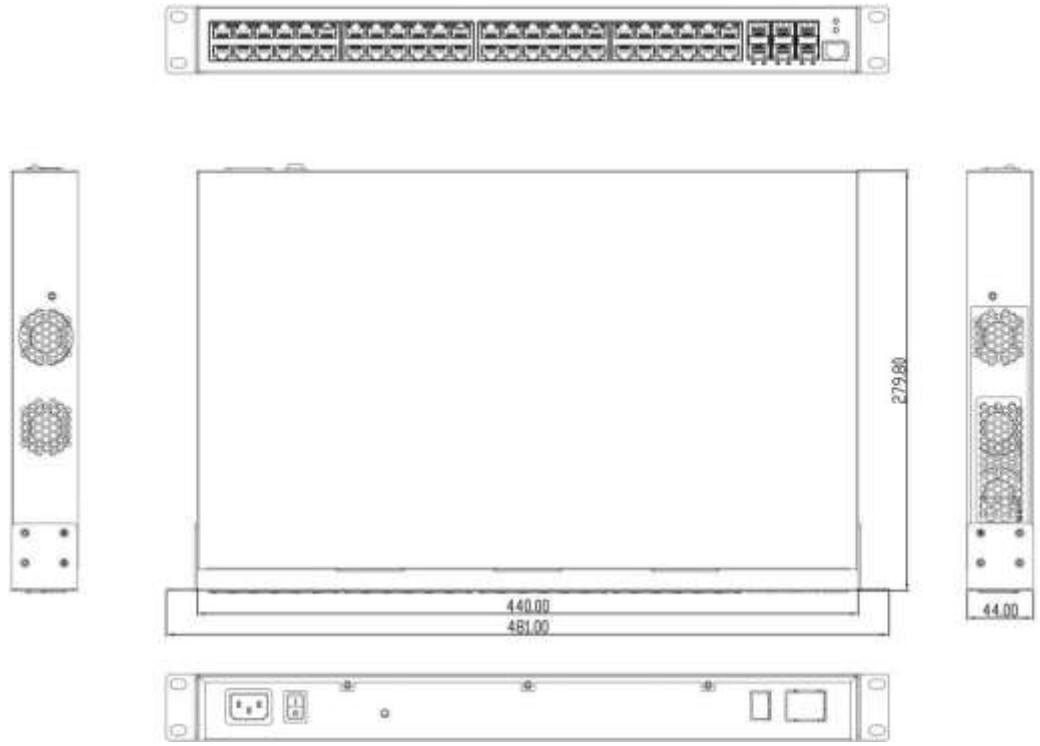
DIMENSION



ORDERING INFORMATION

Model	Description	Power Supply
S4806TGL3	L3 managed 10G uplink Ethernet core routing switch with 48*10/100/1000M RJ45 ports and 6*1/10G SFP+ fiber slot ports. built-in power supply. 19 inch 1U cabinet installation.	75W
Note: The SFP optical module is not included by default and needs to be purchased separately.		

PACKAGE CONTENT

QTY	UNIT	CONTENT
1	SET	54-port 10G uplink core routing switch
1	PC	AC Power Cable
1	SET	Mounting Kits(Hanging Ear)
1	PC	RJ45-DB9 Line
1	PC	Warranty Card