

24 Port SFP, 4 Port 10G SFP+ L2 Fiber Managed Fiber Switch

TS-SG4X24S-GW

Description

TS-SG4X24S-GW Series switches with different port forms including Gigabit Ethernet, SFP Slots, 10G SFP+ Slots, capable of high switching capacity for the network. Provide 1 kinds of out-of-band management ports: RJ45 console ports, Customers can use a USB cable to manage switches through the CLI (command-line interface).



Features

- 4 x 10G SFP+ fiber ports , 24 x 100/1000Mbps SFP fiber Ports, 1 x Console Port;
- Support WEB/HTTP/HTTPS/SSH/Telnet/SNMP/CLI/CONSOLE/ROM diversified management and maintenance methods.
- Support IPV4/IPV6 network management interface and network neighbor management.
- Support DHCP server, DHCPL2 relay agent, DHCPV6 service.
- Support DNS host and client configuration management.
- Support SNMP V1/V2C/V3 and Trap message configuration management.
- Support LLDP and LLDP-MED configuration management, ISDP configuration management
- Support switch timing plan management.
- Support port mode, port bandwidth speed limit, rate control, flow control and other management, port

status panel information display.

- Support 8 groups of static and dynamic lacp aggregation.
- Support unicast/multicast/broadcast storm suppression
- Support STP/RSTP/MSTP production tree protocol and loop protection protocol, support CST and MST configuration, eliminate the second layer loop, and realize link backup
- Support port VLAN, IEEE 802.1Q VLAN, Voice VLAN, VLAN double tag QinQ configuration.
- Support MAC address aging and static MAC address configuration
- Supports IGMP and MVR multicast protocols, supports IGMP Snooping/ MLD Snooping, and meets the needs of multi-terminal high-definition video monitoring and video conference access.
- Support Auto-VoIP and UDLD port configuration
- Support QOS 802.1P and IP DSCP priority, port queue management
- Support Diffserv differentiated service quality management, including Class View/Policy View/IPv6 Class View
- Support Radius/TACACS+ server and 802.1x/Enable level/HTTP/HTTPs/Dot1x authentication
- Support configuration management to prevent DOS attacks
- Support port access security management configuration and status query
- Support port IP security management based on IGMP Snooping/IPSG/dynamic ARP inspection
- Support ACL management of IPV4/IPV6/MAC binding
- Support system log/port statistics/port connection/port cable test/SFP optical module information/EAP packet monitoring management
- Support switch restart/reset/fixed upgrade/configuration import/export/IMG dual firmware management/IP diagnosis/Chinese and English software interchange
- Support switch hardware module/CPU temperature system occupancy view, support software function setting and SNTP time setting
- Users can easily understand the working status of the equipment through the power indicator (PWR), system operation indicator (SYS), port status indicator (Link, L/A).

Application

- Metro Optical Broadband Network: Data network operators such as telecommunications, cable TV, and network system integration, etc.

- Broadband private network: Suitable for financial, government, oil, railway, electric power, public security, transportation, education and other industries
- Multimedia transmission: Integrated transmission of images, voice and data, suitable for remote teaching, conference TV, videophone and other applications
- Real-time monitoring: Simultaneous transmission of real-time control signals, images and data

Specification

I/O Interface	
Power	AC 100-240 V
Port	24*1000Mbps SFP Port 4 *10G SFP+ fiber port 1*Console port 1*USB 2.0 storage port
Performance	
Bandwidth	128Gbps
Packet Forwarding Rate	95.3Mpps
Flash Memory Capacity	256MB
MAC Address	16K
Jumbo Frame	12K
Transfer Mode	Store and forward
Standard	
Network protocol	IEEE802.3: 10Base-T 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 Medium	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
Optical Characteristics	Multi mode: 850/1310nm (0-2KM) Single mode: 1310/1550/1490nm (0-120KM)
Protection	
Security Certificate	CE
Environment	
Working Environment	Working Temperature: -10~50°C Storage Temperature: -40~70°C Working Humidity : 10%~90%, non-condensing Storage Temperature: 5%~90%, non-condensing
Indication	
LED Indicators	PWR、SYS、Link、ACT
Mechanical	
Structure Size	Product Size: 440*250*44mm Product Net-Weight: 1.6KG Product Gross-Weight: 1.9KG
Max Power	35W
Package List	Ethernet switch: 1 Set、User manual: 1 PC、Certificate: 1 PC、Power cord:1PC

Software Function

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	-Loopback Detection -Flow Control *802.3x Flow Control -Port Mirroring *One-to-One *Many-to-One *Flow-Based *Tx/Rx/Both -LLDP, LLDP-MED
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	*32 MSTP Instance *STP Security: Loop back detection, TC Protect, BPDU Filter/Protect, Root Protect	
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
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
	-AAA -DHCP Snooping	-802.1X *Port based authentication

Security	-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	*MAC(Host) based authentication *Guest VLAN *Support Radius authentication and accountability -Port Isolation -MAC Filtering -Secure web management through HTTPS with SSLv3/TLS1.0
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 -HTTP/TFTP File Transfer	-CPU Monitoring -Cable Diagnostics -Access Control -SNTP -System Log -Dual Image -IPv6 Management -PPPoE Circuit ID
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)