



Product Overview

The HSGQ-3510S is an L2+ managed switch with 8*100M/1000M SFP fiber optic module slots and 2*1G/2.5G/10Gbps SFP+ fiber optic module slots, along with 1*Type-C console management interface. It supports static routing, provides comprehensive security policies, robust QoS policies, and rich VLAN functionality, making it easy to manage and maintain, and meeting the networking access needs of enterprises, residential communities, hotels, office networks, and campus networks.

Key Features

- 8*Gigabit SFP optical ports + 2* (SFP+) 10 Gigabit optical ports + 1*Type-C Console port;
- Supports AC and DC dual power supply redundancy design; standard AC+DC dual power supply, AC100-240V, industrial Phoenix terminal DC12V, with DC power switch button.
- Optional support for RTC real-time clock; optional temperature sensor;
- Employing a 64M Flash chip and featuring a dual firmware high-reliability design, the device is guaranteed to never become bricked.
- Supports STP/RSTP/MSTP link protection technologies and ERPS ring network protocol;
- It supports two aggregation modes: static link aggregation and LACP dynamic link aggregation, which effectively increases link bandwidth and improves link reliability, while also enabling load balancing and link backup.
- Supports IPv4 / IPv6 dual protocol stack, static routing, DHCP Server, DHCP Relay, and DHCP Snooping;
- It has loop detection capabilities and adopts an intelligent resolution mechanism to achieve intelligent network self-healing;
- Supports multiple management methods including Type-C Console, Web CLI, Telnet, SSH, and



SNMP (v1/v2c/v3);

- Supports bilingual (Chinese and English) web interface management, making product debugging simpler and more efficient;
- Supports MQTT protocol connection to EDMS cloud management platform, cloud platform supports local deployment and cloud deployment;
- Supports firmware upload and download management via HTTP, TFTP, and FTP transfer methods.

Hardware Specifications

Product Name	HSGQ-3510S
Network Standards	IEEE802.3, IEEE802.3u, IEEE 802.3ab, IEEE802.3z, IEEE802.3ae, IEEE802.3x, IEEE802.1x, IEEE802.1q, IEEE802.1p, IEEE802.1d, IEEE802.1w, IEEE802.1s, IEEE802.3ad, IEEE802.1ab
Interface	8*Gigabit SFP fiber optic module slots 2*SFP+ 10 Gigabit fiber optic module slots 1*Type-C Console interface (115200,8,N,1).
LED indicator light	PWR 1 (green), PWR 2 (green), SYS (green), Port LED (green)
Network media (cables)	100BASE-TX: Cat 5, 5e and above unshielded twisted pair cable ($\leq 100m$) 1000BASE-T: Cat 5e, 6 and above unshielded twisted pair cable ($\leq 100m$) 1000BASE-X: MMF, SMF Modules 10GBASE-X: MMF, SMF Modules 10GBASE-SR: OM1/OM2/OM3 or higher MMF (2m ~ 300m) 10GBASE-LR: IEC B1.1 and B1.3 SMF (2m~10000m)
MAC Address Table	16K
Jumbo Frame	12K Byte
Packet buffer	8.4Mbit
Forwarding Modes	Store-and-forward
Switching Capacity	56 Gbps
Packet Forwarding Rate	42 Mpps
Fan	none
Power input	Dual power supply redundancy design, standard configuration includes AC +DC dual power supply AC100-240V, 50/60Hz Industrial Phoenix terminal DC12V, with DC power switch button
Power Supply	20W
Dimensions (L*W*H)	285x192x44mm, rack mountable
Electrostatic Standard	Contact $\pm 6KV$, air $\pm 8KV$
Surge Protection	Common mode $\pm 6KV$
Operating Temperature	-10°C ~ 50°C
Storage Temperature	-40 °C ~ 85 °C
Operating Humidity	10% ~ 90% Non-condensing
Storage Humidity	5% ~ 90% Non-condensing
MTBF	50,000 hours

Software Specifications

L2 + Features	DHCPv4 Server, DHCPv6 Server
	IPv4/IPv6 Static Route
System Info	Port Status
	Product Model, SN, Firmware Version, Hardware Version
	Memory Usage, CPU Usage
	HTTP/HTTPS/Web-Telnet
	OPEN API
NTP	NTP Client
	Supports domain name resolution
	Supports RTC (real-time clock)
System Upgrade	Full firmware upgrade support over FTP/TFTP/Web
Device Management	Support MGMT management
	Type-C Console
	Support SSH/Telnet/HTTP/HTTPS/SNMP/Web-Telnet/Cloud Management
	Timer Task
	Ping, Traceroute
	IPv4 and IPv6 dual protocol stack
	Supports MQTT protocol
	RMON (Remote Network Monitoring)
Access Management	IP-Based Access Control
	MAC-Based Access Control
	Port-Based Access Control
Management	View current config
	Upload/Download Configuration File
	Restore Factory
User Management	Supports multiple users with different permissions
	root group / admin group
	Supports multiple users working simultaneously
Port Config	Port Speed/Duplex Mode/Auto
	Flow Control (IEEE 802.3x)
	IEEE 802.3az
	MTU
	Jumbo Frame
	Rate Limit, Ingress/Egress Rate Limit
	Traffic statistics
	Port Status alarm

	Storm Control (Broadcast/Multicast/Unicast)
	DDM
	Port Security
	Loop Detection
	Port Isolation
Link Aggregation	Manual Aggregation
	LACP Aggregation (IEEE 802.3ad)
	Load Balance (SRC-MAC/DST-MAC/SRC-IP/DST-IP)
	Max groups and ports per group
Mirror	Port-Based Mirror, Support one to one, Many to one
	Support Ingress/Egress/Both
	Support 4 sets of mirror configuration
	CPU-based Mirror
	Flow-based Mirror
	RSPAN Mirror
MAC Address Table	MAC Address Table
	MAC Aging Time
	MAC Filter
	Static MAC Address (Sticky MAC)
	Port-Based MAC address count limit
	Enable dynamic MAC address learning
	Clear MAC Address Table
	MAC Authentication
	Supports port-based MAC address drift prevention
VLAN	IEEE 802.1Q 4K VLAN
	Port VLAN, Access/Trunk/Hybrid
	VLAN Translate
	VLAN QinQ
	Protocol VLAN
	Voice VLAN
	GVRP
LLDP	LLDP (IEEE 802.1ab)
	LLDP-MED
Spanning-Tree	IEEE802.1d (STP)/802.1w (RSTP)/802.1s (MSTP)
ERPS	ERPS v1
BFD	BFD (Bidirectional Forwarding Detection)
IGMP	IGMP Snooping v1/v2
	IGMP Proxy
	IGMP Fast Leave
	Multicast-VLAN
	IPv6 MLD Snooping v1/v2



PIM	PIM-SM, PIM-SSM
VPN	L2 Tunnel-BPDU Guard, Root Guard, BPDU filtering, BPDU Tunnel (12 protocol-tunnel), BPDU transparent
DHCP	DHCP Server (IPv4/IPv6)
	DHCP Client (IPv4/IPv6)
	DHCP Relay (IPv4/IPv6)
	DHCP Snooping (IPv4/IPv6)
	DHCP Option82, Option18, Option37
Route	IPv4/IPv6 Static Route
	IPv6 ND (Neighbor Discovery)
	IPv6 PMTU
ARP	ARP Scanning Prevention
	ARP Spoofing Prevention
	ARP Guard
	Free ARP
	Dynamic ARP Inspection
	ARP Quantity Control
SNMP	SNMPv1/v2c/v3
	SNMP Trap
ACL	MAC-ACL, SRC/DST MAC
	IP-ACL, SIP/DIP/IP Protocol/SRC Port/DST Port
	VLAN/COS/SRC MAC/DST MAC/Tag/Untag/Time-Range
	Traffic Limit
	Packet-Filter
QoS	Trust COS/DSCP
	Trust Port
	SP/WRR/PQ/WRR+PQ Scheduling
	Based on VLAN/COS/DSCP PolicyMap Stream
	Traffic Classes (8 active priorities)
	Ingress Policing, CAR Stream Shaping
Supports Tail-Drop/WRED congestion avoidance mechanisms	
Alarm	System Alarm
	Support CPU and Memory threshold alarm
	Port alarm, supports port up/down alarm and rate alarm
	Alarm level configuration
Syslog	System log level configuration
	Support system log download
	Support operation log
	Support Syslog Server
	Enable CLI alarm
Security	Radius Client, Supports plaintext and ciphertext



	Tacacs+
	802.1x, Port-Based Authentication
	OpenSSL 1.1.0
	IP Source Guard, IP+MAC+Port+VLAN Binding
	Link Flap Detect
Deny DoS Attack	TCP Flag
	Support IP address verification
	Support port check
	Support ICMP attack detection
Redundant Backup	Smart Link
	Monitor Link

Ordering Information

Product Name	Product Information
HSGQ-3510S	8*SFP+2*10G SFP+ L2+ Managed Switch