

SS5863-24H2QC

Layer 3 10G Base-T & 100G Uplink Switch

Product Overview

The SS5863-24H2QC switch is a high-performance Layer 3 switch that supports multi-rate access at 1G/2.5G/5G/10G and offers 40G and 100G uplink core routing. This switch is designed to meet the high-density and high-bandwidth requirements of next-generation enterprise networks, data centers, and metropolitan area networks. It is also suitable for telecom network operators, as well as the aggregation or access layers in campus Ethernet networks, and can serve as a connection layer in data centers or as the core layer for small and medium-sized enterprises, providing extensive server access solutions.

The SS5863-24H2QC offers a comprehensive set of service features, including Layer 2, Layer 3, VXLAN, OAM/APS, and others, along with robust security and flow control features, hardware-based NetFlow, and high-precision clock capabilities. The switch supports elastic stacking, allowing multiple devices to be virtualized into a single logical entity. This feature facilitates port expansion and switching capacity increases while enabling unified management, upgrades, and maintenance of multiple devices.

Designed to handle large data traffic and ensure non-blocking transmission in data centers, the SS5863-24H2QC provides significant cache capacity and supports an advanced cache scheduling mechanism to optimize the use of this capacity. It is versatile enough for use in network operator environments, campus Ethernet aggregation or access layers, data center access layers, and as a core layer in small and medium-sized enterprises, offering rich server access solutions for data centers.

Product Interface



SS5863-24H2QC

- 24 * 1G/2.5G/5G/10G Base-T
- 2 * 40G QSFP /100G QSFP28
- · 1+1 redundant power supply
- · 440X330X44mm

V2.0-2024



Key Features

Carrier-level equipment stability

- Support IPv4/IPv6 dual protocol stack platform
- > Support multiple link redundancy and network redundancy protocols such as
- STP/RSTP/MSTP/ERPS/LACP

Perfect safety mechanism

- Support ACL security filtering mechanism, which can provide security control
- > functions based on MAC, IP, L4 port
- Support ARP attack automatic protection and user blocking functions
- Support DHCP attack automatic protection based on Mac Address and user
- blocking functions
- Support DDOS and virus attack protection
- Support DHCP-snooping/IP-source-Guard/802.1X and other security features
- > Support link protection functions such as BFD, FlexLink, LACP and ERRP
- Support remote loop detection function
- Support CFM、EFM
- > Support remote user authentication based on Tacacs+, Radius, and Local user authentication

Powerful QoS capabilities

- > Support port speed and flow speed limit function
- > Support classification based on service flow and Qos flow control function
- Support queue scheduling algorithms such as SP/WRR/SP+WRR
- Support port-based and service flow-based mirroring functions

Enhanced multi-service capabilities

- Support DHCP Server and DHCP Relay
- Support L2-Tunnel
- Support Ethernet OAM protocol such as CFM、EFM

Rich routing protocol

- Support static route
- Support dynamic route such as RIP, OSPF, BGP, ISIS

Simple and easy-to-use network management function

- Support CLI based on RS232 serial port, Telnet and SSHv2
- Support WEB-based configure operation management, support SNMP V1/V2/V3
- Support remote upgrade or equipment through FTP and TFTP



Hardware Specification

Attributes	SS5863-24H2QC
Port	24*1G/2.5G/5G/10G Base-T; 2 * 40G QSFP/100G QSFP28
Exchange Capacity	880Gbps
Packet Forwarding Rate	654Mpps
MAC	32K
DRAM/Flash	DRAM: 1GB; Flash:8GB
Power	AC: 100 ~ 240V 47/63Hz; DC: 36V~75V 1+1 redundant Dual Power Supply
Power Consumption	≤150W
Weight	≤3.5kg
Dimensions (Width * Height * Depth)	440X320X44mm (W * D * H)
Environment Temperature	Working Temperature : -10°C ~ 55°C Storge Temperature : -40°C ~ 70°C



Software Specification

Attributes	SS5863-24H2QC
VLAN	Support 4K VLAN Support Vlan based on port, MAC and protocol Support dual Tag VLAN, port-based static QinQ and flexible QinQ
MAC	16K Mac address Support static MAC address setting Support black hole MAC address filtering Support port MAC address limit
Ring Network Protocol	Support STP/RSTP/MSTP Support ERPS Ethernet ring network protection protocol Support Loopback-detection port loopback detection
Port Control	Support two-way bandwidth control Support port storm suppression Support 9K Jumbo ultra-long frame forwarding
Port Aggregation	Support static link aggregation Support dynamic LACP Each aggregation group supports a maximum of 8 ports
Mirroring	Support port mirroring Support stream mirroring
ACL	Support standard and extended ACL Support ACL policy based on time period Provide flow classification and flow definition based on IP header information such as source/destination MAC address, VLAN, 802.1p, ToS, DSCP, source/destination IP address, L4 port number, protocol type, etc.
QoS	Support flow rate limiting function based on custom business flow Supports mirroring and redirection functions based on custom business flows Support priority marking based on custom service flow, support 802.1P, DSCP priority Remark capability Support port-based priority scheduling function, support queue scheduling algorithms such as SP/WRR/SP+WRR



Safety	Support USER 903.1X authorities in Support 903.1X authorities 903.1X author
	Support IEEE 802.1X authentication
	Support Radius& TACACS+ authentication
	Support MAC address learning limit, support black hole MAC function
	Support port isolation
	Support broadcast message rate suppression
	Support IP Source Guard Support ARP flood suppression and ARP spoofing protection
	Support DOS attack and virus attack protection
Layer 3	Support ARP learning and aging
	Support static route
	Support dynamic route RIP/OSPF/BGP/ISIS
	Support VRRP
System Management	CLI、Telnet、WEB、SNMP V1/V2/V3、SSH2.0
	Support FTP, TFTP file upload and download
	Support RMON
	Support SNTP
	Support system work log
	Support LLDP neighbor device discovery protocol
	Support 802.3ah Ethernet OAM
	Support RFC 3164 Syslog
	Support Ping and Traceroute



Purchase Info

Product Name	Product Description
SS5863-24H2QC	24*1G/2.5G/5G/10G Base-T; 2*40G QSFP/100G QSFP28, Dual Power Supply Optional