

# S6670-32QC

## L3 Managed Ethernet Switch

# Product Overview

The S6670-32QC is a cutting-edge Layer 3 switch designed to deliver unmatched performance, scalability, and reliability for high-bandwidth environments such as data centers, enterprise networks, and metropolitan area networks (MANs). As networks evolve to support more demanding applications, such as cloud computing, big data analytics, and high-performance computing, the need for advanced switching solutions becomes critical. The S6670-32QC meets these challenges head-on by providing 32 high-speed 40/100G OSFP28 ports, designed for seamless integration into next-generation network architectures.

The switch incorporates a high-density port configuration, offering tremendous throughput and low-latency performance required for backbone, aggregation, and core network layers. The dual-FRU redundant power supply capability (supporting both AC and DC configurations) ensures continuous operation in mission-critical environments, providing protection against power failures and minimizing service disruption.

With full Layer 3 routing functionality and wire-speed forwarding across all ports, the S6670-32QC supports both IPv4 and IPv6 protocols, making it an ideal solution for modern networks transitioning to IPv6. In addition, it is equipped with advanced business features, such as access control lists (ACLs), flexible Q-in-Q VLAN tagging, and enhanced security protocols, providing administrators with the tools to optimize network performance, ensure security, and simplify network management.

Furthermore, the S6670-32QC supports elastic stacking, allowing multiple switches to be combined into a single logical entity. This provides flexible scalability, enabling businesses to expand their network capacity without the complexity of managing individual devices. Whether deployed in large-scale enterprise environments or service provider networks, the S6670-32QC offers a high-performance solution capable of meeting the most demanding network requirements.



S6670-32QC

- 32*40/100G OSFP28 port
- Dual-FRU AC or DC redundant power supply
- 440mmx410mmx44mm

# Key Features

### Stackable

- Support Combine the processing power of multiple switches into a single logical device.
- Support When a switch in the stack system fails, traffic can be automatically switched to other switches, network availability and redundancy.
- Support Stacking simplifies the management process. Administrators only need to manage one logical device.

### High-density 100G fiber access

- Provides exceptional high-bandwidth connectivity for modern network demands, supporting up to 100G speeds per port.

### Dual-FRU Redundant Power Supply

- Supports both AC and DC power supply configurations with hot-swappable power modules to ensure high availability and reliability in mission-critical environments.

### Equipment Stability

- Support IPv4/IPv6 dual protocol stack platform based on Linux operating system
- Support multiple link redundancy and network redundancy protocols such as STP / RSTP / MSTP / ERPS / LACP
- Support VRRP/ERRP/ERPS/MSTP/Smartlink etc. Various link redundancy and network redundancy protocol
- Support 802.3ad LACP

### 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

### Multi-service Capabilities

- Support DHCP Server and DHCP Relay
- Support L2-Tunnel
- Support Ethernet OAM protocol

### Routing Protocol

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

### Safety Mechanism

- Support ACL security filtering mechanism, which can provide security control based on MAC, IP, L4 port
- Support ARP attach automatic protection and user blocking functions
- Support DHCP attack automatic 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 Ethernet link detection mechanisms
- Support remote user authentication based on Tacacs+, Radius, and Local user authentication

### 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 | S6670-32QC |
|---|---|
| **Port** | 32*40/100G OSFP28<br>support Dual-FRU AC or DC redundant power supply |
| **Exchange Capacity** | 6.4Tbps |
| **Packet Forwarding Rate** | 2800Mpps |
| **VLAN** | 4K |
| **MAC Address** | 128K |
| **Packet Buffer** | 192Mbit |
| **DRAM & Flash** | DRAM:4GB; Flash:8GB |
| **Power** | AC： 100～240V 47/63Hz;<br>DC: 36V ～75V |
| **Power Consumption** | ≤500W |
| **Weight** | 10Kg |
| **Dimensions (W * D * H)** | 440mm*410mm*44mm |
| **Environment** | Working Temperature：-10℃～55℃<br>Storge Temperature：-40℃～70℃<br>Relative Humidity: 5%~95%, non-condensing |

# Software Specification

| Attributes | S6670-32QC |
|---|---|
| **VLAN** | Support 4K VLANs<br>Support 1:1 and N:1 VLAN switching<br>Support basic and flexible QinQ |
| **MAC** | Support 128K MAC address table<br>Support Control the number of MAC addresses on a port<br>Support Port MAC address filtering is supported<br>Supports blackhole MAC |
| **Stackable** | Support Sacking of 08 units through a single ip address.<br>Support Unified management.<br>Support Redundancy mechanism.<br>Support High speed interconnect. |
| **Spanning Tree** | Support the STP/RSTP/MSTP<br>Support BPDU protection, root protection, and loopback protection |
| **Port** | Support bidirectional bandwidth control<br>Support static and dynamic LACP aggregation<br>Support multi-port mirroring<br>Support port storm suppression<br>Support 9K Jumbo ultra-long frame forwarding |
| **User Security** | Support anti-ARP-spoofing spoofing prevention<br>Support automatic suppression of anti-arp-flooding flooding attacks<br>Support IP Source Guard to automatically create IP, MAC, port, and VLAN binding tables<br>Support DOS and ICMP attack defense<br>Support Port Isolation Hardware isolates packets between ports<br>Support MAC address binding to ports and port MAC address filtering are supported<br>Support IEEE 802.1X and AAA/Radius/TACACS+ user authentication |
| **Device Safety** | Support SSHv2 Secure Shell is supported<br>Support SNMP V3 encryption management<br>Support the Telnet login and password mechanism of the Security IP address |
| **Network Security** | Support ARP traffic detection based on each user's MAC address<br>Support ARP packet suppression or user blocking based on ARP traffic detection<br>Support port broadcast/multicast packet suppression and automatic shutdown of dangerous ports<br>Support The DHCP Option82 and PPPoE+ tag can be used to upload user physical location information |

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| **ACL** | Support standard and extended ACL<br>Support ACL policy based on time period<br>Support 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<br>Supports mirroring and redirection functions based on custom business flows<br>Support priority marking based on custom service flow, support 802.1P, DSCP priority Remark capability<br>Supports port-based traffic policing and the two-speed, three-color CAR function<br>Support port-based priority scheduling function, queue scheduling algorithms such as SP/WRR/SP+WRR |
| **Multicast** | Support Layer 2 multicast entry 8K<br>Support IGMPv1 / v2 / v3 Snooping<br>Support PIM-SM, PIM-DM, and PIM-SSM<br>Support IGMP Proxy<br>Support controlled multicast |
| **ARP** | Support ARP capacity 32k<br>Support Aging ARP entries<br>Support the ARP Proxy<br>Support IP address conflict identification between connected users |
| **IPV4** | Support 512 Layer 3 interfaces<br>Support IPv4 route entry 64K<br>Support Layer 3 multicast entry 8K<br>Supports the Ping, Traceroute, VRRP, OSPF, RIP, PIM, BGP, ISIS, and BFD protocols |
| **IPV6** | Support IPv6 route entry 16K<br>Support ICMPv6<br>Support the neighbor discover<br>Supports RIPing, BGP+, and OSPFv3 |
| **Loop Protection** | Support ERPS Ethernet ring network protocol (loop healing time <50ms)<br>Support loopback-detection Loopback detection on ports |
| **Link Protection** | Support FlexLink link backup (link healing time <200ms)<br>Supports RSTP/MSTP link healing hardware acceleration (loop healing time <1s)<br>Support LACP dynamic link aggregation (link healing time <200ms) |
| **Equipment Protection** | Support VRRP host backup |
| **Network Maintenance** | Support the LLDP neighbor device discovery protocol<br>Support RFC3176 Flow traffic analysis to monitor and collect statistics on traffic based on protocols or addresses |

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| | Support Ping and Traceroute |
| **Equipment Management** | Support CLI, Console port, Telnet, SSH, and WEB configuration management<br>Support SNMP V1, V2c, and V3 management<br>Support SNTP |

# Purchase Info

| Product Name | Product Description |
|---|---|
| **S6670-32QC** | 32*40/100G OSFP28;<br>Support Dual-FRU AC or DC redundant power supply |