



32-Port 100G Data Center Managed Ethernet Switch

S6700-32QF

Product Brochure

Product Introduction:

S6700-32QF is a new generation Full 100G Ethernet switch designed for enterprise data center and campus LAN networks, providing high-throughput, high-density 100GE interfaces, larger buffer and lower latency. The S6700-32QF adopts advanced hardware architecture with 32*100GE ports. S6700-32QF provide rich data center service features and management capability.

It realize large buffer of the interfaces, meeting the burst flow forwarding without packet loss; provide the M-LAG technology for virtualization scenarios; provide the modular power and fan design for high reliability. The key components adopt "overvoltage" designs to ensure that the product has the strong ability of continuous operation.

It can work with S6700-32QF ToR switches to build a complete, scalable, virtualized fabric network that meets the data center requirements. Meanwhile, S6700-32QF can also be deployed as aggregation or core switches for enterprise campus LAN networks.



Main Features:

High-density 100GE ports

- Provide fixed 32*100GE interfaces in compact 1U device. The port combination fully satisfies the interface density requirement of data center scenarios.
- Have a maximum of 32*100GE QSFP28 ports, the ports can be connected to S6700-48TF-8QF access switches to build a non-blocking network architecture.

M-LAG for cross-device link aggregation

- Support multi-chassis link aggregation group (M-LAG), which enables links of multiple switches to aggregate into one to implement cross-device link backup. The rest of switches in the M-LAG group are working actively regardless any switch failure. During the upgrade, other switches in the system take over traffic forwarding to ensure uninterrupted services.

Complete data center features

- The S6700-32QF supports VXLAN and EVPN, which can meet the requirements for building data center overlay networks and deploying large layer 2 networks within the data center.

High reliability assurance at the telecommunications level

- S6700-32QF adopts redundant backup design scheme for key hardware components; Multiple reliability protection at both device and link levels; Adopting overcurrent protection, overvoltage protection, and overheating protection technologies; Support rapid switching of 50-200ms link failures to ensure uninterrupted transmission of critical services; Support cross device Link aggregation to facilitate the access server/switch to realize dual active link uplink.

IPv4/IPv6 dual stack multi-layer switching

- The S6700-32QF supports IPv4/IPv6 dual stack multi-layer line speed switching, hardware differentiation and processing of IPv4 and IPv6 protocol packets, and supports various Tunnel tunnel technologies (such as manual configuration tunnel, automatic tunnel, and ISATAP tunnel, etc.). It can provide flexible network communication solutions based on the planning and current status of the IPv4/IPv6 network.

Specifications:

Hardware Specification:	
Network Interface	<ul style="list-style-type: none"> ● 32* 40G/ 100 G Q SFP28 optical interfaces ● 2 * 10 G SFP+ optical interfaces ● 1 * Console port ● 1 * Management port ● 1 * USB port
Redundant Design	<ul style="list-style-type: none"> ● Support 2 pluggable power, 1 + 1 backup mode ● Support 2 pluggable fans
Switching Capacity	● 6 . 44Tbps
Packets Forwarding	● 2 000 Mpps
RAM	● 4 GB
FLASH	● 64MB
EMMC	● 3.5 GB
Port Buffer	● 32 MB
Power Supplier	<ul style="list-style-type: none"> ● DC: -40V~-57V, rated voltage -48V ● AC: 100V~240V, rated voltage 110V/220V ● High voltage DC: 190-400V, rated voltage 240V/336V
Dimension	● WxDxH: 440×420×44mm
Environment	<ul style="list-style-type: none"> ● Operating temperature: 0 °C~40 °C ● Storage temperature: -40°C ~ 70°C ● Operating humidity: 10% ~ 90% RH non condensing ● Storage humidity: 10% ~ 90% RH non condensing
Safety Regulations	● CE/ ROHS/ FCC

Software Specifications:

VLAN	<p>Support 4K VLAN</p> <p>Support 1:1 and N: 1 802.1p based VLAN Mapping</p> <p>Support VLANs based on MAC, protocol, and IP</p> <p>Support Guest VLAN, Voice VLAN</p> <p>Support QinQ, selective QinQ</p>
IP	<p>Support 256K IPV4/64K IPV6</p> <p>Support IPV4/IPV6 static routing</p> <p>Support GRE tunnel</p> <p>Support ECMP</p> <p>Support policy routing</p> <p>Support OSPF, IS-IS, BGP and other IPV4 Dynamic routing protocols</p> <p>Support OSPFv3, IS-ISv6, BGP4+ and other IPV6 Dynamic routing protocols</p> <p>Support IGMP, IGMP Snooping, MLD Snooping</p>
VXLAN	<p>Supports VXLAN Layer 2 switching, routing switching, and Layer 3 gateway</p> <p>Support EVPN VXLAN</p> <p>Support IPv6 VXLAN over IPv4</p>
EVPN	<p>Support EVPN</p> <p>Support MP-BGP, EVPN's RR function</p> <p>Support symmetric IRB</p>
Reliable Features	<p>Support STP/RSTP/MSTP</p> <p>Support BPDU protection, Root protection, and Loop protection; Support for BPDU Tunnel</p> <p>Support BPDU tunnel</p> <p>Support BFD session binding Static routing, VRRP, OSPF, IS-IS, BGP, RIP</p>
Stacking	<p>Supports horizontal virtualization technology and unified management of multiple devices</p>
IPv6	<p>Support ND (Neighbour Discovery), support PMTU</p> <p>Support time period based ACLs</p> <p>Support IPV6 Ping, Traceroute</p> <p>Support dual stacks of IPv4 and IPv6;</p> <p>Support multiple tunnel technologies</p> <p>Supports ACLs based on source IPv6 address, destination IPv6 address, layer 4 port, protocol type, etc</p>

Software Specifications:

<p>QoS</p>	<p>Support L2-L4 packet filtering function, providing filtering based on MAC, IP, port, protocol, IP ToS, 802.IP priority, VLAN ID, SVLAN ID, VLAN range, etc.</p> <p>Support time period based ACLs</p> <p>Support Bandwidth throttling based on stream/VLAN (single speed and dual color)</p> <p>Support streaming of single speed tricolor and dual speed tricolor</p> <p>Support flow based priority scheduling and priority mapping</p> <p>Support scheduling algorithms such as SP/PQ, DRR, SP/PQ+DRR, etc</p> <p>Supports 8 QoS hardware priority queues per port</p> <p>Support 802.1p , DSCP/ToS priority</p> <p>Support queue cache management strategies such as end of queue discarding and WRED</p>
<p>Security Features</p>	<p>Support hierarchical management of user permissions and hierarchical protection of command lines</p> <p>Support 802.1x,RADIUS,TACACS+</p> <p>Support user level quantity limit</p> <p>Support user binding (port, source MAC, source IP address access control)</p> <p>Support SNMP login terminal restrictions</p> <p>Support SSH2.0</p> <p>Support IP source guard</p> <p>Support black hole MAC</p> <p>Supports MAC address limit</p> <p>Support anti ARP and DDoS attacks</p>
<p>Maintenance</p>	<p>Support Console,Telnet,SSH protocols</p> <p>Support SNMP V1/V2/V3,support standard MIB</p> <p>Support Netconf management protocol,support REST API</p> <p>Support for the gNMI protocol,support Telemetry protocol</p> <p>Support FTP/TFTP</p> <p>Support unified management of logs, alarms, and debugging information</p> <p>Support user action logs</p> <p>Support RMON</p> <p>Supports port mirroring and stream mirroring</p> <p>Supports BootROM upgrade and remote online upgrade, supports hot patches</p>

Networking application:

