

32-Port 100G Data Center Managed Ethernet Switch

S6700-32QF

Product Brochure

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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	 32 * 40 G/ 100 G Q SFP2 8 optical interfaces 2 * 10 G SFP+ optical interfaces 1 * Console port 	
	1 * Management port1 * USB port	
Redundant Design	 Support 2 pluggable power, 1 + 1 backup mode Support 2 pluggable fans 	
Switching Capacity	● 6 . 44Tbps	
Packets Forwarding	• 2000 Mpps	
RAM	● 4GB	
FLASH	• 64MB	
EMMC	• 3.5GB	
Port Buffer	• 32 MB	
Power Supplier	 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	
 Operating temperature: 0°C~40°C Storage temperature: -40°C ~ 70°C Operating humidity: 10% ~ 90% RH non condent Storage humidity: 10% ~ 90% RH non condent 		
Safty Regulations	CE/ ROHS/ FCC	



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



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



Networking application:

