HORED 丰润达®

48-Port 25G Data Center Managed Ethernet Switch

S6700-48TF-8QF

Product Brochure

Product   Introduction:

S6700-48TF-8QF is a new generation 25G Ethernet switch designed for enterprise data center and campus LAN networks,providing high-throughput, high-density 25GE interfaces, larger buffer and lower latency. It adopts advanced hardware architecture with 48*25GE access ports and multiple 100GE uplinks. It provides rich data center service features and management capability.

S6700-48TF-8QF 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.

S6700-48TF-8QF can work with S6700-32QF core switches to build a complete, scalable, virtualized fabric network that meets the data center requirements.

Meanwhile, S6700-48TF-8QF can also be deployed as aggregation or core switches for enterprise campus LAN networks.

Main Features:

High-density 25GE ports with 100GE uplinks

• Provide fixed 48*25GE interfaces in compact 1U device. The port combination   fully satisfies the interface density requirement of data center scenarios.

• Have a maximum of 8*100GE QSFP28 uplinks, the uplink ports can be connected   to S6700-32QF core 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 anyswitch failure. During the upgrade, other switches in the system take over traffic forwarding to ensure uninterrupted services.

Stacking virtualization technology

• Supports horizontal virtualization technology and unified management of multiple devices

Complete data center features

• The S6700-48TF-8QF 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

• S6700-48TF-8QF 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 S6700-48TF-8QF 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	• 48*25G/10G SFP28 optical interfaces • 8*100G/40G QSFP28 optical interfaces • 1*Console port • 1* Management port • 1*USB port
Redundant Design	• Support 2 pluggable power, 1 + 1 backup mode • Support 2 pluggable fans
Switching Capacity	• 4Tbps
Packets Forwarding	• 2000 Mpps
RAM	• 4GB
FLASH	• 64MB
EMMC	• 3.5GB
Port Buffer	• 32MB
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
Evironment	• Operating temperature: 0°C~40℃ • Storage temperature: -40℃～70℃ • Operating humidity: 10% ~ 90% RH non condensing • Storage humidity: 10%～90% RH non condensing
Safty Regulations	• CE/ ROHS/ FCC

Software Specifications:	
VLAN	Support 4K 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:

QoS	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.
	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
Security Features	Support hierarchical management of user permissions and hierarchical protection of command lines
	Support 802.1x,RADIUS,TACACS+
	Support user level quantity limit
	Support user binding (port, source MAC, source IP address access control)
	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: