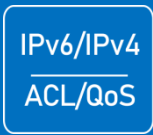




24-10Gb SFP+

4-100Gbps QSFP28

Enterprise Core switch



S7500-24TF4HQF-EI

The S7500-24TF4HQF-EI is a next-generation Enterprise Core Switch engineered for high-density data center aggregation and ultra-high-speed campus backbones. Featuring 24x 10Gb SFP+ ports for flexible fiber access and 4x 100Gb QSFP28 uplinks, it delivers unparalleled bandwidth scalability for tomorrow's network demands. Built with 1+1 Dual Power Supplies and advanced Layer 3 EI capabilities, it ensures maximum uptime and intelligent traffic management for mission-critical networks. Partner with BENCHU GROUP to deploy a robust core infrastructure that scales with your business growth.

**100G Ultra-High-Speed Core Connectivity**

Equipped with 24x 10G SFP+ ports for flexible server aggregation, while 2x 100G QSFP28 uplinks provide massive backbone bandwidth for congestion-free core layers and future-proof scalability to 40G/100G networks.

**Carrier-Grade Power Redundancy**

Features 1+1 Dual Power Supplies supporting load sharing and failover protection, ensuring continuous operation during power events and minimizing downtime risks for critical network cores.

**Advanced Layer 3 Routing**

Supports comprehensive dynamic routing protocols including OSPFv2/v3, BGP, and VRRP for complex topologies. Static routing and IPv4/IPv6 dual-stack capabilities enable efficient inter-VLAN routing and gateway redundancy.

**Comprehensive Network Security**

Provides multi-layer protection with Layer 2/3/4 ACLs, 802.1X authentication, and DHCP snooping. Built-in defense mechanisms against DoS, ARP spoofing, and broadcast storms safeguard network integrity.

**Flexible Management & Visibility**

Manageable via CLI, Web GUI, and SNMP v1/v2c/v3 for seamless NMS integration. Supports sFlow/NetFlow for real-time traffic monitoring, automated provisioning, and simplified troubleshooting.

# S7500-24TF4HQF-EI

24 x 10Gb SFP+, 4 x 100Gbps QSFP28, 1+1 Dual Power Supply, Enterprise Core switch

## Technical Datasheet

<b>Model</b>	<b>S7500-24TF4HQF-HI</b>	
<b>Hardware Specifications</b>		
Connector	24* 10G Base-X SFP+ slots 4* 100G/40G Base-X QSFP+ Slots	
Managed	1x Ethernet	
Console	1 x RS232-to-RJ45 serial port (115200, 8, N, 1)	
Switch Architecture	Store and Forward	
Switch Performance	Backplane bandwidth	1.38Tbps
	Packet forwarding rate	1221.32Mpps
	MAC address	128k
Power requirement	AC100-240V 50/60Hz * 2 Dual redundant power slots, Hot swappable	
Fans	4 Fans	
Dimension(W x D x H)	440 x 290 x 44.5mm(17.32in x 11.42in x 1.75in)	
Weight	< 6kg	
Environment	Operating temperature: -0°C~50°C, operating humidity: 10%~90% Storage temperature: -20°C~75°C, storage humidity: 5%~95%	
Safety	FCC Part15 Class A,CE,RoHs	

<b>Software specifications</b>		
Data Center Characteristics	TRILL/SPB large layer-2 technique	
	FCoE technique	
	SDN	
MAC Switching Capacity	Static Configuration and Dynamically Learning of MAC Address	
	Check and Delete MAC Address	
	MAC Address Aging Time	
	Limit on MAC Address Learning Number	
	MAC Address Filtering Function	
	Black-Hole MAC Items	
VLAN	4K VLAN entries	
	GVRP	
	1:1 and N:1 VLAN Mapping	
	Basic QinQ and Selective QinQ	
Spanning Tree Protocol	Private VLAN	
	STP, IEEE 802.1D Spanning Tree Protocol	
	RSTP, IEEE 802.1w Rapid Spanning Tree Protocol	
Multicast	MSTP, IEEE 802.1s Multiple Spanning Tree Protocol	
	IGMP v1/v2/v3	
	IGMP Snooping	

	<ul style="list-style-type: none"> <li>IGMP Fast Leave</li> <li>Multicast Group Policy and Multicast Number Limit</li> <li>Multicast Traffic Cross Vlan Duplication</li> <li>PIM-SM and PIM-DM</li> </ul>
IPv4	<ul style="list-style-type: none"> <li>Static Routing</li> <li>RIP V1/V2, OSPF and BGP</li> <li>Policy Routing</li> <li>Load Balance through Equal-Cost Routing</li> <li>BFD for OSPF and BGP</li> </ul>
IPv6	<ul style="list-style-type: none"> <li>ICMPv6, DHCPv6, ACLv6, IPv6 Telnet</li> <li>IPv6 Neighbor Discovery</li> <li>Path MTU Discovery</li> <li>MLD and MLD Snooping</li> <li>IPv6 static routing, RIPng, OSPFv3 and BGP4+</li> <li>Manual Tunnel, ISATAP Tunnel and 6-To-4 Tunnel</li> </ul>
MPLS VPN	<ul style="list-style-type: none"> <li>LDP protocol</li> <li>MCE</li> <li>P/PE of MPLS VPN</li> <li>MPLS Traffic Engineering (TE)</li> <li>MPLS Operations, Administration, and Maintenance (OAM)</li> </ul>
QoS	<ul style="list-style-type: none"> <li>Traffic Classification of Each Field of L2/L3/L4 Protocol Headers</li> <li>CAR Traffic Control</li> <li>802.1P/DSCP Priority Remark</li> <li>Multiple Queuing Algorithms such as SP, WRR or SP+WRR</li> <li>Tail-Drop, WRED</li> <li>Traffic Supervision and Traffic Shaping</li> </ul>
Security Features	<ul style="list-style-type: none"> <li>Identification and Filtration of L2/L3/L4 Based ACL</li> <li>Defend Against DDoS attack, SYN Flood of TCP, UDP Flood Attack, etc.</li> <li>Suppression of Broadcast, Multicast and Unknown Unicast Packet.</li> <li>Port Isolation</li> <li>Port Security, IP+MAC+Port Binding</li> <li>DHCP Snooping and DHCP Option 82</li> <li>IEEE 802.1x authentication</li> <li>Radius and Tacacs+ authentication</li> <li>uRPF</li> <li>Command Line Authority Control Based on User Levels</li> </ul>
Reliability	<ul style="list-style-type: none"> <li>Power 1+1 Backup</li> <li>Power and Fan Hot-swap</li> <li>Static/LACP Link Aggregation and Cross Service Card Link Aggregation</li> <li>Ring Network Protection Including EAPS</li> <li>VRRP</li> <li>Ethernet OAM 802.3ah/802.1ag/Itu-Y.1731</li> <li>GR for OSPF and BGP</li> <li>BFD for OSPF and BGP</li> <li>ISSU</li> </ul>

## Management Function

Basic Management Interfaces	Console / Telnet / SNMP v1, v2c, V3
	Firmware upgrade by HTTP / TFTP protocol through Ethernet network
	Remote Network Monitoring (RMON)
	Statistics Analysis Of sFLOW, Netflow
	Clock Management(System Time , NTP Server)
Secure Management Interfaces	Log Management
	SSH, SSL, SNMP
SNMP MIBs	RFC 1213 MIB-II
	RFC 1215 Generic Traps
	RFC 1493 Bridge MIB
	RFC 2674 Bridge MIB Extensions
	RFC 2737 Entity MIB (Version 2)
	RFC 2819 RMON (1, 2, 3, 9)
	RFC 2863 Interface Group MIB
RFC 3635 Ethernet-like MIB	

## Ordering Information

S7500-24TF4HQF-EI	24 x 10Gb SFP+, 4 x 100G/40 QSFP28, 1+1 Dual Power Supply, Enterprise Core switch
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