BCZW

16x 10Gb RJ45,12x 10Gb SFP+

4x 25Gbps SFP28

Enterprise Core switch

IPv6/IPv4 ACL/QoS

Redundant Power

Cyber Security

2 YEAR WARRANTY EXCLUSIVE

S7500-16TE12TF4DF-EI

The S7500-16TE12TF4DF-EI is a high-performance Enterprise Core Switch designed for demanding data center aggregation and campus backbone deployments. Combining 16× 10Gb RJ45, 12× 10Gb SFP+, and 4× 25Gb SFP28 ports, it offers unparalleled flexibility for mixed-media connectivity and future-proof uplinks. Built with carrier-class reliability, including 1+1 Dual Power Supplies and advanced Layer 3 features, this switch ensures continuous operation and intelligent traffic management for mission-critical networks. Partner with BENCHU GROUP to deploy a robust core infrastructure that scales with your business growth.

Flexible Multi-Speed Connectivity

Equipped with 16× 10G Base-T ports for server access and 12× 10G SFP+ ports for fiber aggregation, plus 4× 25G SFP28 uplinks for high-bandwidth core connections. This mixed-port architecture supports seamless integration of legacy and next-gen devices without compromising speed.

High Availability & Redundancy

Features 1+1 Dual Power Supply redundancy with load sharing and failover protection, ensuring uninterrupted operation during power events. Combined with hot-swappable components and ERPS (G.8032), it delivers carrier-grade uptime for critical network cores.

Advanced Layer 3 Routing

Supports comprehensive dynamic routing protocols including OSPFv2/v3, BGP, and RIPv1/v2 for complex network topologies. Static routing, VRRP, and IPv4/IPv6 dual-stack capabilities enable efficient inter-VLAN routing and gateway redundancy.

Enterprise-Grade 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 and data privacy.

Intelligent Management & Automation

Manageable via CLI, Web GUI, and SNMP v1/v2c/v3 for seamless NMS integration. Supports NETCONF/YANG models and sFlow/NetFlow for automated provisioning, real-time traffic monitoring, and reduced operational complexity.

S7500-16TE12TF4DF-EI

12 x 10Gb RJ45, 12 x 10Gb SFP+, 4 x 25Gbps SFP28, 1+1 Dual Power Supply,
Enterprise Core switch

Technical Datasheet

Model	S7500-16TE12TF4DF-EI	
Hardware Specifications		
Connector	16* 1G/2.5G/10G Base-T RJ45 Ports	
	12* 10G Base-X SFP+ Ports	
	4* 25G Base-X SFP28 Ports	
Managed	1x Ethernet	
Console	1 x RS232-to-RJ45 serial port (115200, 8, N, 1)	
Switch Architecture	Store and Forward	
Switch Performance	Backplane bandwidth	960Gbps
	Packet forwarding rate	640Mpps
	MAC address	32k
Power requirement	AC100-240V 50/60Hz * 2	
	Dual redundant power slots, Hot swappable	
Fans	4 Fans, Hot swappable	
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℃~50℃，operating humidity: 10％~90％	
	Storage temperature: -20℃~75℃，storage humidity: 5％~95％	
Safety	FCC Part15 Class A,CE.RoHs	

Software specifications	
Data Center Characteristics	VSS
	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
	Private VLAN
Spanning Tree Protocol	STP, IEEE 802.1D Spanning Tree Protocol
	RSTP, IEEE 802.1w Rapid Spanning Tree Protocol
	MSTP, IEEE 802.1s Multiple Spanning Tree Protocol

Multicast	IGMP v1/v2/v3
	IGMP Snooping
	IGMP Fast Leave
	Multicast Group Policy and Multicast Number Limit
	Multicast Traffic Cross Vlan Duplication
	PIM-SM and PIM-DM
IPv4	Static Routing
	RIP V1/V2, OSPF and BGP
	Policy Routing
	Load Balance through Equal-Cost Routing
	BFD for OSPF and BGP
IPv6	ICMPv6, DHCPv6, ACLv6, IPv6 Telnet
	IPv6 Neighbor Discovery
	Path MTU Discovery
	MLD and MLD Snooping
	IPv6 static routing, RIPng, OSPFv3 and BGP4+
	Manual Tunnel, ISATAP Tunnel and 6-To-4 Tunnel
MPLS VPN	LDP protocol
	MCE
	P/PE of MPLS VPN
	MPLS Traffic Engineering (TE)
	MPLS Operations, Administration, and Maintenance (OAM)
QoS	Traffic Classification of Each Field of L2/L3/L4 Protocol Headers
	CAR Traffic Control
	802.1P/DSCP Priority Remark
	Multiple Queuing Algorithms such as SP, WRR or SP+WRR
	Tail-Drop, WRED
	Traffic Supervision and Traffic Shaping
Security Features	Identification and Filtration of L2/L3/L4 Based ACL
	Defend Against DDoS attack, SYN Flood of TCP, UDP Flood Attack, etc.
	Suppression of Broadcast, Multicast and Unknown Unicast Packet.
	Port Isolation
	Port Security, IP+MAC+Port Binding
	DHCP Snooping and DHCP Option 82
	IEEE 802.1x authentication
	Radius and Tacacs+ authentication
	uRPF
	Command Line Authority Control Based on User Levels
Reliability	Power 1+1 Backup
	Power and Fan Hot-swap
	Static/LACP Link Aggregation and Cross Service Card Link Aggregation
	Ring Network Protection Including EAPS
	VRRP
	Ethernet OAM 802.3ah/802.1ag/Itu-Y.1731
	GR for OSPF and BGP
	BFD for OSPF and BGP
	ISSU

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)
	Log Management
Secure Management Interfaces	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	
S7500-16TE12TF4DF-EI	12 x 10Gb RJ45, 12 x 10Gb SFP+, 4 x 25Gbps SFP28, 1+1 Dual Power Supply, Enterprise Core switch