

24-port GbE fixed configuration
1-RU switch

Up to four 10 GbE uplinks

Scalable stacking technology
supports 72 fiber 100M or GbE
ports in up to three S25Ps

S-Series S25P High Performance GbE/10 GbE Access Switch

The Force10 S25P is a compact form factor switch that delivers secure high Gigabit Ethernet fiber density at the network edge, enabling cost-effective scalability while eliminating bandwidth bottlenecks at key aggregation points.

Key Applications

Coupled with the E-Series, which delivers unmatched resiliency and performance, the S25P enables IT managers to deploy a reliable end-to-end 10 GbE solution that spans from core to network edge.

- Small form factor intra-POP Layer 2 interconnects
- Extend fiber reach in small to medium metro POPs
- 10 GbE LAN PHY or DWDM optics for cost-effective metro or inter-POP transport
- Scalable multi tenant unit (MTU) core or distribution switch
- Secure migration of server interconnects from 100Base-FX to GbE speeds

Key Features

High density, small form factor for high performance Ethernet environments.

- 24 SFP ports in a 1-RU form factor with two modular slots
 - 20 ports GbE or 100 Base FX with SFP pluggable optics ports
 - 4 ports 10/100/1000 Base-T shared with SFP pluggable optics ports
- Optional Modules
 - 2-port 10 GbE LAN PHY (XFP pluggable optics)
 - 2-port 10 GbE (CX4)
 - 2-port 12 Gbps stacking
 - 1-port 24 Gbps stacking
- Switching fabric capacity of 144 Gbps and forwarding capacity of more than 95 Mpps
- Stack up to three S25Ps to deliver a high capacity solution
- Supports jumbo frames of up to 9,216 bytes; ideal for high-end server connectivity and network attached file servers
- Full complement of standards-based Layer 2 and Layer 3 features
- Built-in power redundancy



Specifications: S-Series S25P Fiber Switch



Ordering Information

ORDER NUMBER	DESCRIPTION
S25-01-GE-24P	24-port 100FX/1GbE switch with SFP pluggable optics & 4 10/100/1000Base-T ports with 2 Modular slots
S50-01-10GE-2P	2-Port 10 GbE XFP Fiber Module*
S50-01-10GE-2C	2-Port 10 GbE CX4 Module*
S50-01-12G-2S	2-Port 12Gbs Stacking Module*
S50-01-24G-1S	1-Port 24Gbs Stacking Module*
S50-01-SSC-12G	60cms stacking cable for S50-01-12G-2S
S50-01-LSC-12G	4m stacking cable for S50-01-12G-2S
S50-01-SSC-24G	60cms stacking cable for S50-01-24G-1S
S50-01-LSC-24G	4m stacking cable for S50-01-24G-1S
S50-01-SW-L3	Layer 3 Software Upgrade for S25-01-GE-24P

* Optional module for S25-01-GE-24P

Physical

24 line-rate ports supporting GbE or 100Base-FX SFPs
 4-ports 10/100/1000Base-T (shared with SFP ports)
 2 Optional module slots:
 2 line-rate ports 10 Gigabit Ethernet XFP
 2 line-rate ports 10 Gigabit Ethernet CX4
 2 line-rate ports 12 Gigabit Stacking
 1 line-rate port 24 Gigabit Stacking
 1 RJ-45 Console/management port with RS-232 signaling
 Size: 17.32 w x 16.73 d x 1.73" h (440 x 425 x 44 mm)
 Weight: 14.41 lbs (6.54 Kg)

Power Supply:

Primary: 100-240V AC, 50-60Hz, Autosensing
 Secondary: 100-240V AC, 50-60Hz, Autosensing
 Max. Thermal Output: 44.782BTU/hr
 Max. Current Draw per System: 100vAC/4A, 240vAC/2A
 Max. power consumption: 150W
 19" rack mountable

Standard 1U chassis height

Max. Operating Specifications:

Temperature: 32° to 122°F (0° to 50°C)
 Operating humidity: 10 to 85% (RH), non-condensing
 Max. Non-operating Specifications:
 Storage Temperature: -40° to 158°F (-40 to 70°C)
 Storage humidity: 5 to 95% (RH), non-condensing
 Reliability: MTBF 116,000 hours

Redundancy

Redundancy in Stack Connectivity (self healing ring)
 Redundancy with up to 4 ports of 10 GbE uplinks
 Redundancy with dual modular slots
 Redundancy with GbE uplinks – using Link Aggregation
 Built-in Power Redundancy

Performance

Layer 2 MAC Addresses: 16K
 Layer 3 Forwarding Entries: Up to 3k LPM table and 4k host entries
 Switching Fabric Capacity: 144 Gbps
 User traffic capacity: 128 Gbps (95 Mpps)
 Jumbo Frame Support: 9216 bytes
 Link Aggregation: 8 links per Link Aggregation Group and 48 groups per system
 Stacking capacity: Up to 96 Gbps
 Queues per port: 8 Queues (8th queue reserved for stacking)
 VLANs: 1024 VLANs with 4096 tag value support

IEEE Compliance

802.3 10Base-T
 802.3u Fast Ethernet (100Base-TX, 100Base-FX)
 802.3ab 1000Base-T
 802.3z Gigabit Ethernet
 802.3ae 10 Gigabit Ethernet
 802.3ak 10 Gigabit Ethernet CX4
 802.1p L2 Prioritization
 802.1Q VLAN Tagging, Double VLAN tagging
 802.1s Multiple Spanning Tree Protocol
 802.1w Rapid Spanning Tree Protocol
 802.1AB Link Layer Discovery Protocol
 802.3ad Link Aggregation with LACP
 802.1D Bridging
 802.3x Flow Control

RFC Compliance

OSPF:

1765 OSPF Database 2154 OSPF MD5
 Overflow 2328 OSPF v2
 1850 OSPF MIB

RIP:

1058 RIP v1 2082 RIP MD5
 1724 RIP MIB 2453 RIP v2

IP Multicast:

1112 IGMP 3376 IGMPv3
 2236 IGMPv1 and v2 Ietf-draft IGMP-snooping v1 and v2
 2362 PIM-SM

General Routing and Switching Protocols:

768 UDP 1256 ICMP
 783 TFTP 1519 CIDR
 791 IP 1542 BootP (relay)
 792 ICMP 1812 IP v4 Routers
 793 TCP 1866 HTML
 826 ARP 2068 HTTP
 854 Telnet 2030 SNTP
 894 IP over Ethernet 2131 BootP/DHCP
 903 Reverse ARP helper
 951 BootP 2236 IGMP v1 and v2
 1027 Proxy ARP 2338 VRRP

Security:

1492 TACACS+
 2865 RADIUS
 3128 Protection Against a Variant of the Tiny Fragment Attack

Port Security:

Ietf-draft SSH v2, SSL, Layer 2/3/4 ACLs,
 IP Broadcast Control

Quality of Service:

7 user queues per port
 IEEE 802.1p
 IP DiffServ support
 Per port rate limiting
 Per queue rate limiting
 Strict Priority and Weighted Round Robin Scheduling

Management and SNMP:

RADIUS/TACACS+ Authentication
 Secure Web-based Management
 Industry Familiar CLI: Scripting, Command completion,
 Context sensitive help

1157 SNMP v1
 1212 Concise MIB Definition
 1213 SNMP v2 (MIB-II)
 1493 Bridge MIB
 1643 Ethernet-like MIB
 1901 Community based SNMPv2
 1905 Protocol Operations for SNMPv2
 1906 Transport Mappings for SNMPv2
 1907 Management Information Base for SNMPv2
 1908 Coexistence between SNMPv1, SNMPv2
 1724 RIP v2 MIB extension
 1850 OSPF v2 MIB
 2096 IP forwarding table MIB
 2233 The Interfaces Group MIB using SMI v2
 2570 SNMP v3
 2665 Ethernet-like interfaces
 2674 VLAN MIB
 2787 VRRP MIB
 2819 RMON (Groups 1,2,3,9)
 2933 IGMP MIB
 2934 PIM MIB for IPv4

Compliances

Safety

CUS 60950, 3rd edition (US NRTL through CSA)
 CSA 60950, 3rd edition
 CE Mark (EN 60950)
 CB Report, all country deviations
 EN 60825-1 Safety of Laser Products-Part 1: Equipment Classification Requirements and User's Guide
 EN 60825-2 Safety of Laser Products-Part 2: Safety of Optical Fibre Communications Systems
 21 CFR 1040.10 and 1040.11 FDA laser device requirements

EMC

USA: FCC CFR47 Part 15, Subpart J, Class A
 Canada: ICES-003, Issue-2, Class A
 Europe: EN55022 1998 (CISPR 22: 1997), Class A
 Japan: VCCI V3/01.4 Class A
 EN 61000-4-2 ESD
 EN 61000-4-3 Radiated Immunity
 EN 61000-4-4 EFT
 EN 61000-4-5 Surge
 EN 61000-4-6 Low Frequency Conducted Immunity
 EN 300 386 V1.3.1 (2001-09) EMC for Network Equipment
 EN 55024 1998

Telecoms

JATE (for Japan)

RoHS Compliance

All components of S25P are EU RoHS Directive compliant with the exception of lead, which is exempt from the directive for network equipment



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