

A dark, atmospheric photograph of a server room with rows of server racks and overhead lighting.

FS S3200 Series Switches Data sheet

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Product overview

S3200 Series routing switches, high-performance Layer 2+ Ethernet switch with 2.5G Multi-Gigabit and 10G SFP+ Ports compact 1U form factor. Built from the ground up with the combination of advanced hardware and software, the switch provides a Layer 2+ routing solution for next generation HOME, SMBs, Enterprises, Wi-Fi 6 AX Access, high speed NAS, and 2.5G LAN networks.

The S3200-8MG4S 8-Port Ethernet L2+ Switch has 8x Gigabit RJ45, with 4x 10Gb SFP+ Uplinks. This managed enterprise switch delivers 120 Gbps switching capacity and 89.28 Mpps forwarding rate. It offers powerful ACL, QoS, OSPF, RIP, and DHCP Server functions for superior processing performance and network reliability.

The S3200-8MG4S-U 8-port managed PoE+ switch is equipped with 8x 100/1000/2.5GBASE-T ports, 4x 10Gb SFP+ uplinks. 8x RJ45 ports support both IEEE 802.3af/at for powering attached IP phones/wireless access points, or other standards-compliant PoE and PoE+ end network devices. In addition, the 4x 10G SFP+ ports, can provide high-speed uplink and server/storage/high-performance workstation connectivity. Built from the ground up with the combination of advanced hardware and software, the switch provides a Layer 2+ routing solution for next-generation HOME/SMB/Enterprise/Wi-Fi 6 AX Access/high-speed NAS networks.

Product highlights

- Support QoS, ACL, OSPF, RIP and DHCP Server
- Support WEB/SNMP/SSH for Flexible Operation
- Support RADIUS, TACACS+, and etc. for Security
- Comprehensive Layer 2+ Functionality with No License Required

Platform details

Switch models and configurations

Figures 1 through 2 show the FS S3200 series switches.

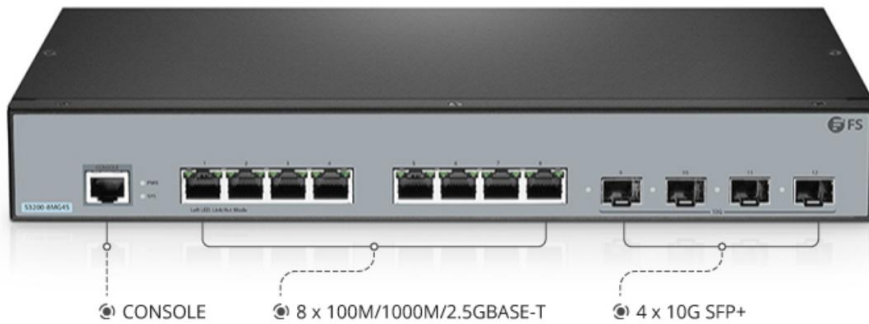


Figure 1.
S3200-8MG4S, 8-Port Ethernet L2+ Switch, 8 x 100M/1000M/2.5G Multi-Gigabit RJ45, with 4 x 10Gb SFP+ Uplinks

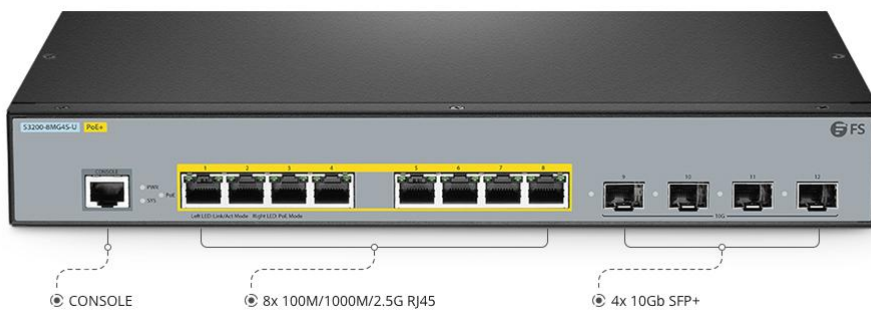


Figure 2.
S3200-8MG4S-U, 8-Port Ethernet L2+ Managed PoE+ Switch, 8 x 100M/1000M/2.5G Multi-Gigabit RJ45, with 4 x 10Gb SFP+ Uplinks

Switch configurations and port density

Table 1 shows the FS S3200 series configurations and port density.

Table 1. Switch configuration and port density

FS P/N	S3200-8MG4S	S3200-8MG4S-U
Description	8-Port Ethernet L2+ Switch, 8 x 100M/1000M/2.5G Multi-Gigabit RJ45, with 4 x 10Gb SFP+ Uplinks	8-Port Ethernet L2+ Managed PoE+ Switch, 8 x 100M/1000M/2.5G Multi-Gigabit RJ45, with 4 x 10Gb SFP+ Uplinks
Port		
1G port density	8	8
10G port density	4	4
10G port density with breakout cable	4	4
Console port	1	1
Memory and processor		
CPU	RTL9313	RTL9313
SDRAM	4GB	4GB
Flash memory	128MB	128MB
Packet buffer	16MB	16MB

Note:

RJ45 ports can be used as 100M/1/2.5/5/10G ports for Ethernet connection, does not support 1G-T copper transceivers.

SFP+ ports can be used for 1/10G connection.

Power supplies and fans

Table 2 provides more details on the FS S3200 series power supplies and fan specifications.

Table 2. Power supply and fan specifications

Description	S3200-8MG4S	S3200-8MG4S-U
Power supply	1 Built-in	1 Built-in
Fan number	1	2
Airflow	Left-to-Right	Right-to-Left
Acoustic noise	52.3dB	52.3dB
Maximum fan speed	4000	8200
Max. power consumption	35W	24W (280W with PoE)
Power max rating	24W	24W (without PDs)
Input-voltage range and frequency	Input Voltage AC100-240V Output Voltage DC12V Output Max Power Consumption 35W	
Power supply efficiency	≥84%	≥84%
Input current	≤1A	≤3A
Output ratings	12V	12V
Output holdup time	≥20mS	≥20mS
Power-supply input receptacles	C13	C13
Power cord rating	36W	280W
PoE standard	-	IEEE 802.3af/at
PoE budget	-	250W

Switch performance

Table 3 shows performance specifications for the FS S3200 series switches.

Table 3. Performance specifications

Performance for all S3200 Series Switches	S3200-8MG4S	S3200-8MG4S-U
Switching capacity	120Gbps	120Gbps
Forwarding rate	89.28 Mpps	89.28 Mpps
Total number of MAC addresses	32K	32K
Total number of IPv4 routes (indirect routes)	57344	57344
Total number of IPv4 host routes (direct routes and ARP)	12288	12288
Total number of IPv6 routes (indirect routes)	1K	1K
Total number of IPv6 host routes (direct routes and NDP)	2K	2K
Total number of IPv4 multicast routes	6K	6K
Total number of IPv6 multicast routes	2K	2K
QoS ACL scale	2K	2K
Security ACL scale	2048	2048
VLAN IDs	4K	4K
STP virtual ports (port* VLANs) for MST	64	64
Total switched virtual interfaces (SVIs)	1K	1K
Jumbo frame	12K	12K

Platform benefits

Table 4 lists the software spotlights for the FS S3200 series switches.

Table 4. Software spotlights

Functionality	Description
Access Control List	L2/L3/L4 ACL flow identification and filtration IPv4/IPv6/MAC/ARP ACL
Security	Black hole MAC Dynamic ARP inspection IEEE802.1X RADIUS authentication, TACAS+ Local authentication Port isolation, DHCP snooping AAA and SSL IP source guard, DoS prevention, IP/MAC/Port Binding (IMPB)
Quality of Service	Priority Queues scheduling Strict Priority (SP) scheduling WRR, WFQ, Hybrid (WRR+SP or WFQ+SP) queues scheduling IP ToS, DSCP Trusted QoS Port-based rate limiting
Ethernet Switching	Voice VLAN, 4K static VLAN, IEEE 802.1Q VLAN MAC-based VLAN and surveillance VLAN Link aggregation, MLD v1/v2, MVR GVRP, QinQ
Device Management	SNMP v1/v2c/v3 Syslog, WEB UI, Telnet, SSH v1/v2 CLI-based, using console port
IP Service	Line-rate IPv4/IPv6 dual-stack multi-layer switching IPv6 duplicate address detection, ICMPv6 IPv6 neighbor discovery RIP, OSPF v1/v2
High Availability	IEEE 802.1D Spanning Tree Protocols (STPs) IEEE 802.1w Rapid Spanning Tree Protocol (RSTP) IEEE 802.1s Multiple Spanning Tree Protocol (MSTP) EEE (802.3az) BPDU guard/filtering Hardware architecture to reduce energy consumption and noise
Multicast	IGMP v1/v2/v3, IGMP Snooping Broadcast, unknown multicast&unicast storm control

Software requirements

The FS S3200 Series Switches run on FS OS Software version.

Table 5 lists the latest software requirements for the switch models.

Table 5. Latest software requirements

FS P/N	Description	Latest software requirements
S3200-8MG4S	S3200-8MG4S, 8-Port Ethernet L2+ Switch, 8 x 100M/1000M/2.5G Multi-Gigabit RJ45, with 4 x 10Gb SFP+ Uplinks	-
S3200-8MG4S-U	S3200-8MG4S-U, 8-Port Ethernet L2+ Managed PoE+ Switch, 8 x 100M/1000M/2.5G Multi-Gigabit RJ45, with 4 x 10Gb SFP+ Uplinks	-

Product specifications

Table 6 shows the product specifications for the FS S3200 series switches.

Table 6. Product specifications

Description	S3200-8MG4S	S3200-8MG4S-U
Environmental		
Operating temperature	-10 to 50°C (14 to 122°F)	-10 to 50°C (14 to 122°F)
Storage temperature	-40 to 70°C (-40 to 158°F)	-40 to 70°C (-40 to 158°F)
Operating humidity	10% to 90% (Non-condensing)	10% to 90% (Non-condensing)
Storage humidity	0 to 95% (Non-condensing)	0 to 95% (Non-condensing)
Temperature alarm	55°C	55°C
Acoustic noise	52.3dB	52.3dB
Physical specifications		
Dimensions (HxWxD)	1.71"x12.5"x8.15" (43.6x320×207mm)	1.71"x12.5"x8.15" (43.6x320×207mm)
Rack units (RU)	1U	1U
Weight	3kg	3kg

Description	S3200-8MG4S	S3200-8MG4S-U
Electrical		
Voltage (auto ranging)	100-240VAC	100-240VAC
Frequency	50/60Hz	50/60Hz
Power rating (maximum consumption)	35W	35W (without PDs) 250W (with PDs)
Mean-time between failures		
MTBF (hours)	>50K	>50K
Connectors		
Connectors and cabling	• 1/10GBASE-T ports: RJ-45 connectors, 4-pair Cat5E/Cat6/Cat6a UTP cabling • SFP transceivers: LC fiber connectors (single-mode or multimode fiber) • SFP+ transceivers: LC fiber connectors (single-mode or multimode fiber) • SFP28 transceivers: LC fiber connectors (single-mode or multimode fiber) • QSFP+ transceivers: MPO and LC fiber connectors (single-mode or multimode fiber) • QSFP28 transceivers: MPO and LC fiber connectors (single-mode or multimode fiber) • FS StackWise stacking ports: copper-based FS StackWise cabling • Ethernet management port: RJ-45 connectors, 4-pair Cat5 UTP cabling • Management console port: RJ-45-to-DB9 cable for PC connections	
Power connectors	• Customers can provide power to a switch by using the internal power at the back of the switch • Internal power supply connector: The internal power supply is an auto-ranging unit. It supports input voltages between 100 (115 for 1100WAC) and 240 VAC. Use the supplied AC power cord to connect the AC power connector to an AC power outlet	
Standards		
Standards	802.1s, 802.1w, 802.1x, 802.1ad, 802.1d, 802.1p, RMON, SNMPV1 V2 V3	

Quality certification

At FS, our Quality Commitment lies in all aspects of processes, resources, and methods that enable us to build superior networks for our customers. Through a quality policy focusing on continuous improvement of products and services, we're able to achieve the highest levels of satisfaction for our customers. To that end, every FS employee is accountable for contributing to the value of the products and services we deliver.

Figure 3 shows some of the authoritative certifications obtained by FS S3200 Series Switches.



Figure 3.

Optics supported

For details about the optical modules available, visit:

S3200-8MG4S: -

S3200-8MG4S-U: -

Warranty, service and support

FS S3200 Series Switches enjoy 5 years limited warranty against defects in materials or workmanship. For more information for FS Returns & Refunds policy, visit <https://www.fs.com/policies/warranty.html> or https://www.fs.com/policies/day_return_policy.html

FS provides a personal account manager, free professional technical support, and 24/7 live customer service to each customer.

- Professional Lab: Test each product with the latest and advanced networking equipment.
- Free Technical Support: Provide free & tailored solutions and services for your businesses.
- 80% Same-day Shipping: Immediate shipping for in-stock items.
- Fast Response: Direct and immediate assistance from an expert.

For more information, visit https://www.fs.com/service/fs_support.html

Ordering information

Table 7 provides the ordering information for S3200 series switches.

Table 7. Ordering information

FS P/N	Product description
Switch hardware	
S3200-8MG4S	S3200-8MG4S, 8-Port Ethernet L2+ Switch, 8 x 100M/1000M/2.5G Multi-Gigabit RJ45, with 4 x 10Gb SFP+ Uplinks
S3200-8MG4S-U	S3200-8MG4S-U, 8-Port Ethernet L2+ Managed PoE+ Switch, 8 x 100M/1000M/2.5G Multi-Gigabit RJ45, with 4 x 10Gb SFP+ Uplinks

Additional information

For more information about the S3200 Series Switches, contact your account manager or visit https://www.fs.com/search_result?keyword=S3200

Document history

New or revised topic	Described in	Date
Updates to FS S3200 Series Switches Data Sheet	Updated all	11/23/2022