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N9550 Series Switches Data Sheet

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| Product overview

FS N9550 Series Data Center Switches are a series of high performance switches that provide 25G/100G/400G wirespeed connectivity for high-density availability, designed to be deployed as leaf-spine switches in data center applications.

These switches come pre-loaded with PicOS, including the perpetual license and a 5-year PicOS standard maintenance support package for 400G switch.

N9550-32D is a spine switch in a compact 1U form factor with 32 400Gb QSFP-DD, each QSFP-DD port supports 1 x 400GbE or 1 x 100GbE, or via breakout cables 4 x 100GbE or 4 x 25GbE, providing high-density availability.

N9550-64D is a spine switch in a compact 4U form factor with 64 400Gb QSFP-DD, which is capable for high-density availability.

| Product highlights

- 64 x QSFP-DD Switch Ports (Only for N9550-64D Switch)
- Flexible 25/100/400GbE Interface Speeds (Only for N9550-32D Switch)
- 1+1 Hot-Swappable Power Supplies, 5+1 Smart Fans (Only for N9550-32D)
- 3+1 Hot-Swappable Power Supplies, 5+1 Smart Fans (Only for N9550-64D)
- Intel Xeon Processor D-1518 4-Core (Only for N9550-32D)
- Intel Xeon Processor D-1627 4-core 2.9GHz (Only for N9550-64D)
- With Resilient, Programmable, and Scalable Operating System PicOS.

Platform details

Switch models and configurations

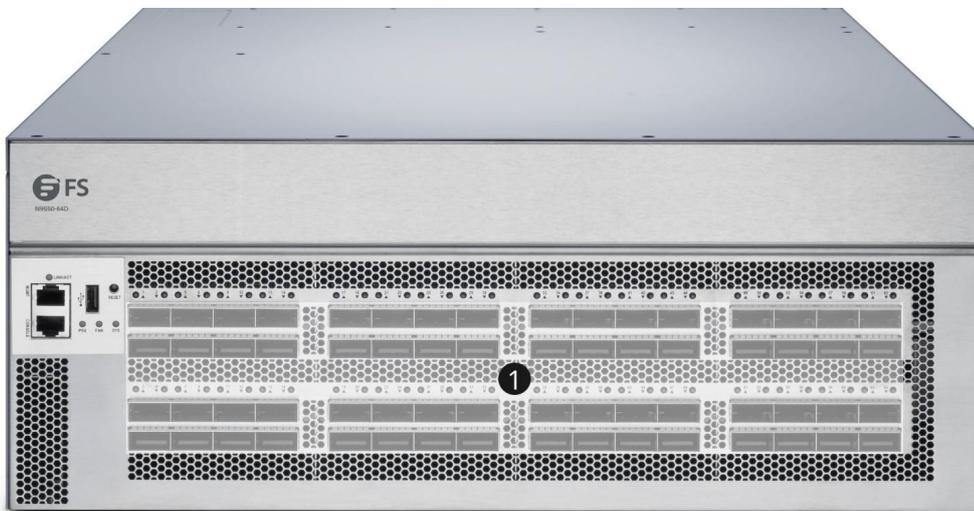
Figures 1 through 2 show the FS N9550 series switches.



1 32x 400G QSFP-DD

Figure 1.

N9550-32D, 32-Port Ethernet L3 Data Center Switch, 32 x 400Gb QSFP-DD, Broadcom Chip, PicOS Installed, with Perpetual License and 5-year Service Bundle



1 64x 400G QSFP-DD

Figure 2.

N9550-64D, 64-Port Ethernet L3 Data Center Switch, 64 x 400Gb QSFP-DD, Broadcom Chip, PicOS Installed, with Perpetual License and 5-year Service Bundle

Switch configurations and port density

Table 1 shows the FS N9550 series configurations and port density.

Table 1. Switch configuration and port density

FS P/N	N9550-32D	N9550-64D
Description	N9550-32D, 32-Port Ethernet L3 Data Center Switch, 32 x 400Gb QSFP-DD, Broadcom Chip, PicOS Installed, with Perpetual License and 5-year Service Bundle	N9550-64D, 64-Port Ethernet L3 Data Center Switch, 64 x 400Gb QSFP-DD, Broadcom Chip, PicOS Installed, with Perpetual License and 5-year Service Bundle
Port		
100G port density	32	-
200G port density	-	-
400G port density	32	64
100G port density with breakout cable	128	-
25G port density with breakout cable	128	-
Management ports		
Management ports	3	1
Console port	1	1
USB port	1	1
Memory and processor		
Switch chip	Broadcom BCM56980 Tomahawk 3	Broadcom BCM56990 Tomahawk 4
CPU	Intel® Xeon® processor D-1518 4-core	Intel® Xeon® processor D-1627 4-core 2.9GHz
SDRAM	DDR4: 8 GB x 2 SO-DIMM	-
Flash memory	m.2 64GB MLC	-
Packet buffer	64MB	-
SPI Flash	16 MB x 2	-

Power supplies and fans

Table 2 provides more details on the FS N9550 series power supplies and fans specifications.

Table 2. Power supply and fan specifications

Description	N9550-32D	N9550-64D
Power supply	Dual 1+1 redundant power supplies (AC)	3+1 redundant power supplies (AC)
Fan number	6x Hot-swappable Fans (5+1 Redundancy)	6x Hot-swappable Fans (5+1 Redundancy)
Airflow	Front-to-Back	Front-to-Back
Acoustic noise	-	-
Max. power consumption	1300W	1852W
Input-voltage range and frequency	100-240 VAC at 50-60Hz VAC	100-240 VAC, 50-60Hz, 10A MAX or 240 VDC, 10A, MAX

Switch performance

Table 3 shows performance specifications for the FS N9550 series switches.

Table 3. Performance specifications

Performance	N9550-32D	N9550-64D
Switching capacity	12.8 Tbps	25.6 Tbps
Forwarding rate	5210 Mpps	10300 Mpps
Total number of MAC addresses	8K	-
VLAN IDs	4K	-
Jumbo frame	9K Bytes	-

Product specifications

Table 4 shows the product specifications for the FS N9550 series switches.

Table 4. Product specifications

FS P/N	N9550-32D	N9550-64D
Environmental		
Operating temperature	0° C to 45° C (32° F to 113° F)	0° C to 40° C (32° F to 104° F)
Storage temperature	-40° C to 70° C (-40° F to 158° F)	-40° C to 70° C (-40° F to 158° F)
Operating humidity	5% to 95% (non-condensing)	-
Storage humidity	-	-
Physical specifications		
Dimensions (HxWxD)	1.69"x17.25"x21.1" (43 x 438 x 536mm)	6.89"x17.32"x29.92" (175 x 440 x 760 mm)
Rack units (RU)	1 RU	4 RU
Weight	24.38lbs (11.09kg) with full-configuration	81.57lbs (37kg) with full-configuration
Electrical		
Voltage (auto ranging)	100-240 VAC	100-240 VAC
Power rating (maximum consumption)	1300W	1852W

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 N9550 Series Switches.



Figure 3.

Warranty, service and support

FS N9550 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 5 provides the ordering information for N9550 series switches.

Table 5. Ordering information

FS P/N	Product description
N9550-32D	N9550-32D, 32-Port Ethernet L3 Data Center Switch, 32 x 400Gb QSFP-DD, Broadcom Chip, PicOS Installed, with Perpetual License and 5-year Service Bundle
N9550-64D	N9550-64D, 64-Port Ethernet L3 Data Center Switch, 64 x 400Gb QSFP-DD, Broadcom Chip, PicOS Installed, with Perpetual License and 5-year Service Bundle

Additional information

For more information about the N9550 Series Switches, contact your account manager or visit

https://www.fs.com/search_result?keyword=N9550

Document history

New or revised topic	Described in	Date
Updates all	Updates all	12/21/2023



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