Juniper QFX5100-96S-AFO

Datasheet

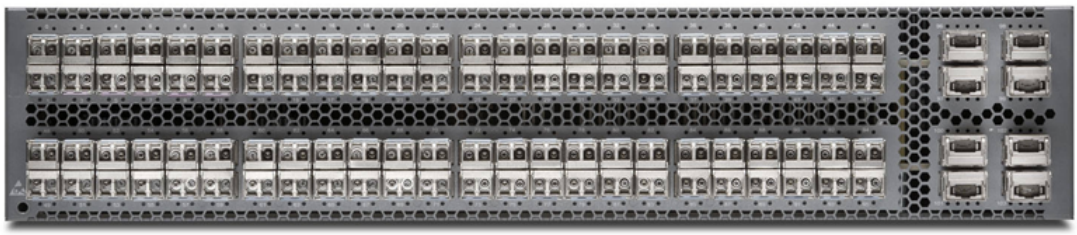
Product Overview

- Juniper QFX5100-96S-AFO is a 2U high-density data center switch with 96 native 1/10GbE SFP/SFP+ ports and 8 40GbE QSFP+ ports.
- The QFX5100-96S delivers 2.56 Tbps switching capacity and 1.44 Bpps forwarding performance for leaf, aggregation, and high-density server access deployments.
- Each QSFP+ port can operate as a 40GbE interface or be split into four 10GbE interfaces, allowing up to 104 10GbE ports with breakout cables.
- The AFO configuration uses redundant AC power supplies and front-to-back airflow for port-to-FRU cooling in hot-aisle/cold-aisle data center designs.
- Junos OS provides Layer 2 and Layer 3 networking, including EVPN-VXLAN, BGP, MPLS, MC-LAG, and automation support.
- Dual management ports, a rear console port, USB, and redundant field-replaceable fans support operational resilience and serviceability.

Product Highlights

- **96-Port 1/10GbE Density:** Provides 96 SFP/SFP+ ports for high-density server and data-center access deployments.
- **40GbE Uplinks:** Adds 8 QSFP+ ports, each configurable for 40GbE or four 10GbE interfaces.
- **2.56 Tbps Switching:** Delivers 2.56 Tbps switching capacity and 1.44 Bpps forwarding performance.
- **AFO Redundancy:** Combines redundant AC power supplies, redundant fans, and front-to-back airflow.

Detailed Features



QFX5100-96S-AFO

Quote | Help

Component	Specification
Product Type	2U high-density data center switch
Downlink Ports	96 × 1/10GbE SFP/SFP+
Uplink Ports	8 × 40GbE QSFP+
Switching Capacity	2.56 Tbps
Forwarding Rate	1.44 Bpps

High-Density SFP/SFP+ Access

The QFX5100-96S-AFO provides 96 native 1/10GbE SFP/SFP+ interfaces for dense server access, leaf, and aggregation deployments.

Flexible 40GbE Breakout

Eight QSFP+ ports support native 40GbE operation or four-way 10GbE breakout, enabling up to 104 10GbE interfaces with supported breakout cables.

Wire-Speed Switching

The switch provides 2.56 Tbps of switching capacity and 1.44 Bpps forwarding performance in cut-through or store-and-forward mode.

Front-to-Back Airflow

The AFO configuration directs airflow from the port side toward the FRUs, supporting front-to-back data center cooling layouts.

Redundant AC Power

The AFO ordering variant includes redundant AC power supplies, allowing the switch to continue operating if one installed power supply fails.

Junos Data Center Features

Junos OS supports Layer 2 and Layer 3 functions with data center capabilities such as EVPN-VXLAN, BGP, MPLS, and MC-LAG.

Management and Serviceability

Two management ports, a rear console port, USB, and field-replaceable fan modules provide flexible administration and maintenance access.

High-Density 2U Platform

The 2U chassis combines 96 SFP/SFP+ ports and 8 QSFP+ ports in a 17.36-inch rack-width platform for dense data center access and aggregation.

Technical Specifications

Product Specifications

Feature	Value
Product Model	QFX5100-96S-AFO
Product Type	2U high-density data center switch
Port Profile	96 × 1/10GbE SFP/SFP+, 8 × 40GbE QSFP+
1GbE SFP Ports	96 (48 copper 1GbE)
10GbE SFP+ Ports	104 with breakout cables
40GbE QSFP+ Ports	8
Switching Capacity	2.56 Tbps
Forwarding Rate	1.44 Bpps
QSFP+ Breakout	Each QSFP+ port can be configured as 4 × 10GbE
Switching Mode	Cut-through and store-and-forward
Airflow	Front-to-back (ports-to-FRUs); AFO
Power Supplies	Redundant AC power supplies
Fans	Redundant field-replaceable fan modules
Management Ports	2: 1 RJ-45 and 1 SFP
Console Port	Rear console port
USB Port	1 USB port

Feature	Value
Junos OS Features	Layer 2/Layer 3, EVPN-VXLAN, BGP, MPLS, MC-LAG, and automation support
Power Consumption	263W (QFX5100-96S-AFO/AFI)
Dimensions (H × W × D)	3.46 × 17.36 × 22.44 in (8.8 × 44.09 × 57 cm)
Weight	32.5 lb (14.74 kg)
Form Factor	2U rack-mount switch

Product Comparison

Feature	QFX5100-96S-AFO	QFX5100-48S-AFO	QFX5100-24Q-AFO
Primary port profile	96 × 1/10GbE SFP/SFP+	48 × 1/10GbE SFP/SFP+	24 × 40GbE QSFP+
40GbE QSFP+ ports	8	6	24
10GbE interfaces with breakout	104	72	96/104
Switching capacity	2.56 Tbps	1.44 Tbps	2.56 Tbps
Forwarding rate	1.44 Bpps	1.08 Bpps	1.44 Bpps
Form factor	2U	1U	1U
Power supplies	Redundant AC	Redundant AC	Redundant AC
Airflow	Front-to-back	Front-to-back	Front-to-back
Management ports	1 RJ-45 and 1 SFP	1 RJ-45 and 1 SFP	1 RJ-45 and 1 SFP
Power consumption	263W	150W	161W
Dimensions (H × W × D)	3.46 × 17.36 × 22.44 in	1.72 × 17.36 × 20.48 in	1.72 × 17.36 × 20.48 in
Weight	32.5 lb (14.74 kg)	21.8 lb (9.9 kg)	21.6 lb (9.8 kg)
Best fit	High-density 10GbE aggregation	1/10GbE access with 40GbE uplinks	High-density 40GbE leaf or aggregation

Accessories

Category	Accessories
Included Accessories	- Rack installation kit
Optional Accessories	- QFX5100-HDNSE-LIC advanced feature license
	- Supported SFP/SFP+, QSFP+, DAC, AOC, and breakout cables selected through the Juniper Hardware Compatibility Tool

Support & Warranty

24/7 Online Service

3-Year Premium Warranty

Professional Technical Support

100% Low Price Guarantee

100% Quality Assurance

100% Money Back Guarantee

About Us



Router-switch.com, headquartered in Hong Kong since 2002, has been a trusted global leader in ICT distribution for 20+ years. We provide cutting-edge networking, cybersecurity, data center, and AI solutions to meet evolving business needs. Our wide range includes products from top brands like Cisco, Arista, Aruba, Fortinet, Mellanox, and Huawei, ensuring access to the latest technology and innovations.

21,500+ global customers

600,000+ end-users

200+ countries & regions

20+ years experience

500+ global vendors

100,000+ SKUs available

700+ local sales experts

50-98% off global list prices

Contact Us

Email

Sales Inquiries: sales@router-switch.com
Expert Technical Support: ccie-support@router-switch.com
Cooperative Partnerships: partner@router-switch.com

Follow Us

Facebook: @Routerswitchdotcom
LinkedIn: Router-switch.com
X: @routerswitchcom
Instagram: @routerswitchdotcom

Phone

USA: +1-626-655-0998
Hong Kong: +852-25925389 / +852-25925411

Global Footprint

Global Warehouses & Service Centers Across Continents.



Global Branches

Hong Kong Branch

Rm 605, 6/F, Fa Yuen Comm Bldg, 75-77 Fa Yuen St, Mongkok, Kowloon, Hong Kong, China

Shenzhen Branch

Jingfeng Building, 1001 Shangbu South Road, Futian District, Shenzhen, China

USA Branch

35 E Horizon Ridge Pkwy, Ste 110 #30131, Henderson, NV 89002, USA

UK Branch

Third Floor, 207 Regent Street, London W1B 3HH, UK

References

[1] Juniper Networks. (2024). QFX5100 Ethernet Switch Datasheet. Retrieved November 16, 2026, from https://www.juniper.net/content/dam/www/assets/datasheets/us/en/switches/qfx5100-ethernet-switch-datasheet.pdf

[2] Juniper Networks. (2022). QFX5100 Switch Hardware Guide. Retrieved November 16, 2026, from https://www.juniper.net/documentation/us/en/hardware/qfx5100/qfx5100.pdf