

Juniper QFX5120-48Y-AFO2 Datasheet



Product Overview

- The QFX5120-48Y-AFO2 is a high-performance Layer 3 managed switch designed for data center top-of-rack and campus enterprise deployments.
- It features 48 versatile SFP28 ports, offering robust connectivity options for a wide range of devices and applications.
- With 8 high-speed QSFP28 ports, the switch ensures top performance and low latency, catering to high-bandwidth applications and data-intensive environments.
- The switch supports advanced EVPN-VXLAN capabilities, making it ideal for agile data centers requiring overlay/underlay network architectures, enhancing scalability and flexibility in network management.
- It seamlessly integrates with existing infrastructure, providing a cost-effective solution for expanding network capacity without compromising on performance.

Product Highlights

- **High Connectivity:** Equipped with 48 versatile SFP28 ports and 8 high-speed QSFP28 ports, providing robust and flexible networking options.
- **Exceptional Performance:** Delivers up to 4 Tbps L2 and L3 performance (bidirectional) with ultra-low latency of 800 nanoseconds, ensuring smooth and efficient data handling.
- **Agile Infrastructure:** Supports agile data centers, allowing for seamless integration.
- **Unmatched Availability:** Designed for high scale, high availability, and superior performance, making it perfect for both data center and campus deployments.
- **Advanced Networking:** Incorporates EVPN-VXLAN capabilities, ideal for modern overlay and underlay network architectures.

Detailed Features



QFX5120-48Y-AFO2

Component	Specification
Switching Capacity	4 Tbps (bidirectional) / 2 Bpps
Management Ports	2 x RJ-45 ports
1GbE SFP	48
10GbE SFP+	48 / 80 (with breakout cable)
25GbE SFP	48 / 80 (with breakout cable)



Versatile Port Options

Offers 48 SFP28 ports that support 25GbE, 10GbE (SFP+), and 1GbE (SFP) downlinks for a wide range of connectivity needs. Includes eight 100GbE (QSFP28) or 40GbE (QSFP+) uplink ports for high-speed data transfer.

High-Performance Metrics

Capable of delivering up to 4 Tbps of Layer 2 and Layer 3 performance (bidirectional), with latency as low as 800 nanoseconds, ensuring efficient data transmission and minimal delay.

Robust CPU and Memory

Powered by a 2.2 GHz quad-core Intel CPU, equipped with 16GB memory and 50GB SSD storage, providing high processing power and ample storage capacity.

Comprehensive Layer 2 Features

Supports essential Layer 2 features such as STP (Spanning Tree Protocol), RSTP (Rapid Spanning Tree Protocol), MSTP (Multiple Spanning Tree Protocol), BPDU protect, VLAN (Virtual Local Area Network), and Link Aggregation.

EVPN-VXLAN Support

Enables advanced networking architectures, providing flexibility and scalability for modern data centers.

Advanced Layer 3 Routing

Includes advanced Layer 3 routing capabilities, offering static routing, RIP (Routing Information Protocol), OSPF (Open Shortest Path First), IS-IS (Intermediate System to Intermediate System), BGP (Border Gateway Protocol), VRRP (Virtual Router Redundancy Protocol), DHCP relay, and Proxy ARP.

Technical Specifications

Hardware Specifications

Feature	Value
Dimensions (W x H x D)	1.72 x 17.36 x 20.48 in. (4.37 x 44.09 x 52.02 cm)
Switching Mode	Cut-through and store-and-forward
Max Load	272 W
Typical Load	247 W
40GbE QSFP+	8 (configurable as 4 x 10GbE or 40 Gbps)
100GbE QSFP28	8 (configurable as 4 x 25GbE or 100 Gbps)



Product Comparison

Feature	QFX5120-48Y	QFX5120-48YM	QFX5120-48T	QFX5120-32C
1GbE Ports	48	48	48	32
10GbE Ports	48/80	48/80	48/80	32
25GbE Ports	48/80	48/80	-	-
40GbE Ports	8	8	8	-
100GbE Ports	8	8	8	32
Switching Capacity	4 Tbps	4 Tbps	4 Tbps	4 Tbps
Latency	800 ns	800 ns	800 ns	800 ns
CPU	2.2 GHz	2.2 GHz	2.2 GHz	2.2 GHz
Memory	16 GB	16 GB	16 GB	16 GB
Storage	50 GB SSD	50 GB SSD	50 GB SSD	50 GB SSD

Accessories

Category	Accessories
Optional Accessories	- Mounting Bracket
	- Patch Cable
	- Quick Installation Guide
Optional Accessories	- Rack Mount Kit
	- SFP Transceivers
	- Power Supply Units



Support & Warranty



24/7 Online Service



3-Year Premium Warranty



Professional Technical Support



100% Low Price Guarantee

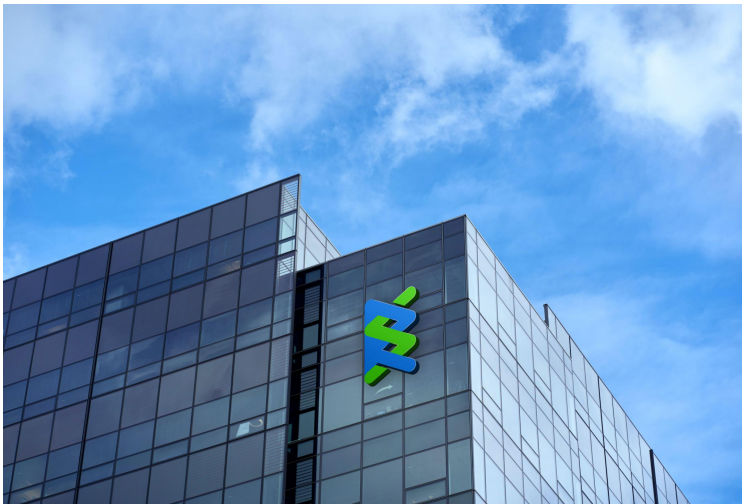


100% Quality Assurance



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 23 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.

18,000+

global customers

600,000+

end-users

200+

countries & regions

23

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

Phone

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

Follow Us

Facebook: [@Routerswitchdotcom](https://www.facebook.com/Routerswitchdotcom)
LinkedIn: [Router-switch.com](https://www.linkedin.com/company/router-switch.com)
X: [@routerswitchcom](https://twitter.com/routerswitchcom)
Instagram: [@routerswitchdotcom](https://www.instagram.com/routerswitchdotcom)



Global Footprint

Global Warehouses & Service Centers Across Continents.



Global Branches

Headquarters (Hong Kong)

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

USA Branch

3592 Rosemead Blvd, B #220, Rosemead, CA 91770, USA

Shenzhen Branch

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

UK Branch

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



References

[1] Juniper. (n.d.). QFX5120 Ethernet Switch Datasheet. From <https://www.juniper.net/us/en/products/switches/qfx-series/qfx5120-ethernet-switch-datasheet.html>.

[2] Router-switch.com. (n.d.). Overview of Juniper QFX5120-48Y-AFO2. From <https://www.router-switch.com/qfx5120-48y-af02.html>.