



Cisco

N9K-C93180YC-EX

Datasheet

Product Overview

- The Cisco Nexus® 9300-EX Series switches are a part of the fixed Cisco Nexus 9000 platform built on Cisco Cloud Scale technology.
- Ideal for cloud-scale deployments and growing modern enterprises needing scalable and high-performance data centers.
- It supports 48 x 1/10/25-Gbps and 6 x 40/100-Gbps QSFP28 ports with highly flexible Layer 2 and Layer 3 scalability.
- Featuring dual operational modes: NX-OS mode for standard environments and ACI mode for policy-based management.
- Designed for efficient migration from 100-Mbps to 25-Gbps at the server and up to 100-Gbps at the aggregation layer.
- The Cisco Nexus 9300-EX delivers robust performance, scalable architecture, and investment protection for future growth.

Product Highlights

- **Scalable Performance:** 48 x 1/10/25-Gbps and 6 x 40/100-Gbps QSFP28 ports ensure high performance and flexibility.
- **Dual Operational Modes:** Operates in either NX-OS mode or ACI mode, catering to different network management needs.
- **Investment Protection:** Supports seamless migration from lower speeds to 25-Gbps and 100-Gbps, protecting existing investments.
- **High Scalability:** Supports an extensive number of endpoints and cloud services, making it ideal for growing enterprises.

Detailed Features



N9K-C93180YC-EX

 [Quote](#) | [Help](#)

Component	Specification
Ports	48 x 1/10/25-Gbps and 6 x 40/100-Gbps QSFP28
CPU	4 cores
System memory	24 GB
SSD drive	64 GB
Airflow	Port-side intake and exhaust



High-Performance CPU

With 4 CPU cores and 24 GB of system memory, it ensures top-notch processing power for data-intensive applications.

Extensive Port Options

Offers 48 x 1/10/25-Gbps ports and 6 x 40/100-Gbps QSFP28 ports to accommodate diverse connectivity requirements.

Advanced Management

The switch supports both NX-OS and ACI modes, providing flexibility in deployment and management to suit various operational needs.

Investment Protection

Seamlessly migrate from existing 100-Mbps, 1-Gbps, and 10-Gbps speeds to higher 25-Gbps and 100-Gbps speeds for future-proof network scaling.

Rich Feature Set

Supports numerous routing and network protocols like VRF, ECMP, and IGMP, ensuring comprehensive network capability.

High Scalability

Handles large-scale deployments with support for up to 896,000 IP host entries and 4096 VLANs.

Efficient Power Usage

Offers multiple power supply options and efficient thermal design to reduce operating costs while maximizing uptime.

Flexible Deployment

Designed to meet the evolving needs of data centers, with a robust architecture ideal for growing enterprises and virtualized environments.

Technical Specifications

Product Specifications

Feature	Value
Maximum number of Longest Prefix Match (LPM) routes	896,000
Maximum number of IP host entries	896,000
Maximum number of MAC address entries	256,000
Maximum number of multicast routes	32,000
Number of Interior Gateway Management Protocol (IGMP) snooping groups	Shipping: 8,000; Maximum: 32,000
Maximum number of Cisco Nexus 2000 Series Fabric Extenders per switch	16
Maximum number of Access Control List (ACL) entries	8000 ingress; 4000 egress
Maximum number of VLANs	4096
Number of Virtual Routing and Forwarding (VRF) instances	Shipping: 1,000; Maximum: 16,000
Maximum number of ECMP paths	64
Maximum number of port channels	512
Maximum number of links in a port channel	32
Number of active SPAN sessions	4
Maximum number of VLAN's in Rapid per-VLAN Spanning Tree (RPVST) instances	3,967



Feature	Value
Maximum number of Hot-Standby Router Protocol (HSRP) groups	490
Number of Network Address Translation (NAT) entries	1,023
Power supplies	500W AC, 650W AC, 930W DC, or 1200W HVAC/HVDC
Typical power	210W
Maximum power	470W
Management ports	1 RJ-45 and 1 SFP
USB ports	1
RS-232 serial ports	1
System buffer	40 MB
Dimension	1.72 x 17.3 x 22.5 in. (4.4 x 43.9 x 57.1 cm)
MTBF	390,330 hours
Minimum ACI image	ACI-N9KDK9-11.3
Minimum NX-OS image	NXOS-703I4.2
System memory	24 GB

Product Comparison

Feature	N9K-C93180YC-EX	C9300-24P-E	C9500-32QC-EDU
Ports	48 x 1/10/25-Gbps and 6 x 40/100-Gbps QSFP28	24 x 10/100/1000 Mbps	32 x 100/1000 Mbps
CPU	4 cores	2 cores	4 cores
System memory	24 GB	8 GB	16 GB
Maximum number of VLANs	4096	256	4096
Power Supply	500W AC, 650W AC, 930W DC, 1200W HVAC/HVDC	715W AC	350W AC
Typical Power	210W	322W	167W
Maximum number of ECMP paths	64	128	64



Accessories

Category	Accessories
Included Accessories	- Power Adapter - Mounting Bracket - Quick Installation Guide
Optional Accessories	- SFP Transceiver - PoE Injector



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

High Connectivity: sales@router-switch.com

Expert Technical Support: ccie-support@router-switch.com

Cooperative Partnerships: ccie-support@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] Cisco Systems. (2023). Cisco Nexus 9300 Platform Switches Data Sheet. Retrieved from <https://www.cisco.com/c/en/us/products/collateral/switches/nexus-9000-series-switches/datasheet-c78-742283.html>