



Cisco

C1-N9K-C93108TC-FX

Datasheet



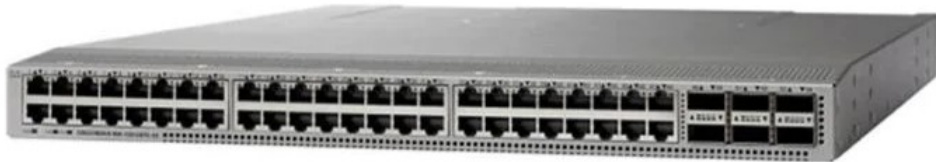
Product Overview

- The Cisco Nexus 9300-EX Series is part of the advanced Nexus 9000 platform, designed for cloud-scale networks and high-performance data centers.
- It is ideal for modern data centers, large enterprise IT environments, and cloud-focused businesses seeking scalable, reliable switching.
- Key specifications include 24 × 10GBASE-T ports, 6 × 40/100G uplink ports, and large buffer memory for efficient data handling.
- It features seamless migration across 100M, 1G, 10G, 25G, 40G, 50G, and 100G connections, supporting flexible cloud transitions.
- Intelligent management is provided via both NX-OS and Cisco ACI modes, delivering versatile deployment and operation benefits.
- The switch delivers future-ready networking for expanding data centers, enabling secure, automated cloud and virtualization infrastructure.

Product Highlights

- **Architectural Flexibility:** Cisco ACI™ support, advanced VXLAN EVPN fabrics, and segment routing enable scalable, modern cloud and data center networks.
- **Extensive Programmability:** Day-zero automation, native YANG/OpenConfig model support, and deep RESTCONF/NETCONF API integration streamline operations.
- **Intelligent Buffer Management:** AFD, ETRAP, and Dynamic Packet Prioritization ensure optimized performance for both short and long-lived traffic.
- **High Availability and Robust OS:** vPC, 64-way ECMP, modular NX-OS, and DCNM unify reliability, operational continuity, and simplified management.

Detailed Features



C1-N9K-C93108TC-FX

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

Component	Specification
Downlink Ports	24 × 10GBASE-T (RJ45)
Uplink Ports	6 × 40/100G QSFP28
Total Ports	48
Switching Modes	NX-OS mode, ACI mode
Buffer Size	40 MB



Cloud-Scale Performance

The Nexus 9300-EX platform supports massive scalability, advanced packet buffering, and high throughput. This meets the increasing bandwidth demands typical of growing cloud data centers. Its architecture ensures reliable performance at both access and aggregation layers, enabling large-scale workload mobility and fast response to dynamic service requirements.

Flexible Architecture for Seamless Migration

The switch enables easy migration from legacy speeds to next-generation connections. With 24 × 10GBASE-T ports and 6 × 40/100G uplinks, it allows stepwise upgrades without disruption. This ensures ongoing investment protection, allowing businesses to evolve infrastructure at their own pace and with minimal risk of obsolescence.

Intelligent Network Management

Supporting both Cisco NX-OS and ACI modes, the device accommodates diverse operational models, from traditional CLI-based management to comprehensive policy-driven automation. This dual-mode flexibility allows organizations to adopt new paradigms as needs evolve while maintaining consistency in network operation, monitoring, and policy enforcement.

Comprehensive Programmability and Automation

With extensive RESTful APIs, OpenConfig/YANG model support, and integrations for Ansible, Chef, Puppet, and SALT, the switch streamlines deployment and daily operations. Zero-touch provisioning and automated configuration ensure rapid rollouts, minimize human error, and optimize ongoing network maintenance tasks.

Advanced Traffic Handling

Cisco innovative buffer management technologies, such as Approximate Fair Dropping and Dynamic Packet Prioritization, intelligently distinguish and handle different traffic types. This prevents bottlenecks, guarantees smooth delivery of mission-critical data, and optimizes link utilization in bursty, mixed-traffic environments.

Robust Layer 3 Protocol Support

The switch delivers comprehensive routing support, including OSPF, BGP, EIGRP, PIM-SM, SSM, RIPv2, and MSDP. Its flexible use of TCAM and large forwarding tables enable highly scalable Layer 2/3 services, addressing the needs of multi-tenant and virtualized data center scenarios.

High Availability and Reliability

Hot-swappable components, N+1 PSU/fan redundancy, advanced patching, vPC technology, and 64-way ECMP routing all contribute to resilient operation. These design strengths reduce downtime, enable non-stop patching and upgrades, and support continuous network services critical to enterprise environments.

Enhanced Visibility and Assurance

Built-in Cisco DCNM, Data Broker, Tetration Analytics, and Network Assurance Engine provide deep insight, real-time monitoring, and continuous policy compliance. Proactive verification and analytics-driven troubleshooting decrease incident resolution time, simplify root cause analysis, and strengthen network security.

Technical Specifications

Product Specifications

Feature	Value
Model	C1-N9K-C93108TC-FX
Brand	Cisco
Port Configuration	24 × 10GBASE-T (RJ45) ports, 6 × 40/100G QSFP28 uplink ports, Total ports: 48
Downlink Supported Speeds	100 Mbps, 1 Gbps, 10 Gbps
Maximum LPM Routes	1,792,000
Maximum IP Host Entries	1,792,000
MAC Address Entries	512,000



Feature	Value
Multicast Routes	128,000
IGMP Snooping Groups	8,000 (Max: 32,000)
ACL Entries	5,000 ingress / 2,000 egress (single-slice)
VLANs Supported	4,096 (127 reserved)
VRF Instances	1,000 (Max: 16,000)
Port Channels	512 (Up to 32 links per channel)
ECMP Paths	64
CPU	4 cores
System Memory	24 GB
System SSD	64 GB
System Buffer	40 MB
Management Ports	1 × RJ-45, 1 × SFP (L1/L2 ports unused)
USB Ports	1
RS-232 Serial Ports	1
SPAN Sessions	4 active
Power Supply Options	500W AC, 930W DC, 1200W HVAC/HVDC
Typical Power Consumption (AC/DC)	276 W
Maximum Power Consumption (AC/DC)	460 W
Input Voltage	AC: 100–240 V, HVAC: 200–277 V, DC: -48 V to -60 V, HVDC: -240 V to -380 V
Frequency	50–60 Hz (AC)
Fans	4 (hot-swappable)
Airflow	Port-side intake and exhaust
Dimensions (H × W × D)	1.72 × 17.3 × 22.5 in (4.4 × 43.9 × 57.1 cm)
Acoustics	64.2 dBA at 40% fan, 68.9 dBA at 70% fan, 77.8 dBA at 100% fan speed
MTBF	319,790 hours
Operating Temperature	32°F to 104°F (0°C to 40°C)
Storage Temperature	-40°F to 158°F (-40°C to 70°C)
Humidity	5% to 95% non-condensing
Altitude	0–13,123 ft (0–4,000 m)



Feature	Value
RoHS Compliance	Yes
Safety Standards	UL 60950-1, CAN/CSA-C22.2 No. 60950-1, EN 60950-1
Minimum ACI Image	ACI-N9KDK9-14.2.1
Minimum NX-OS Image	NXOS-9.3(2) or later

Product Comparison

Feature	C1-N9K-C93108TC-FX	C1-N9K-C9364C	C9404R
Fixed Ports	24 × 10GBASE-T (RJ45) + 6 × 40/100G QSFP28	64 × 100G QSFP28	Modular (up to 192 x 25G, 48 x 100G dependent on line cards)
Switching Capacity	Not Specified (Data Center Grade)	12.8 Tbps	Up to 9 Tbps
Buffer Size	40 MB	120 MB	Not specified
Layer 3 Routing	Comprehensive Layer 3, BGP, OSPF, EIGRP	Comprehensive, advanced DC routing	Comprehensive, with enhanced scalability
NX-OS/ACI Support	Yes, dual mode	Yes, dual mode	Yes, modular chassis
Hot-Swappable Redundancy	PSU/fans, N+1	PSU/fan, N+1	Module/PSU/fan, N+1
Rack Units	1 RU	2 RU	Chassis (4RU)
Management Integration	DCNM, API, ACI, Tetration	DCNM, API, ACI, advanced telemetry	DCNM, API, ACI, advanced security
Suitable Scenario	Cloud-scale campus/data center aggregation	Core/aggregation in very large DC	Enterprise/Data Center modular core

Accessories

Category	Accessories
Included Accessories	- Power Supply Unit - Mounting Kit - Console Cable
Optional Accessories	- QSFP28 Optical Module - Enhanced Fan Tray - DC Power Supply



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. (2023). Cisco Nexus 9300-EX Series Switches Data Sheet. Retrieved from <https://www.cisco.com/c/en/us/products/collateral/switches/nexus-9000-series-switches/datasheet-c78-742283.html>