

Cisco Nexus 9200 Platform Switches

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Product overview

Built on the latest Cisco Cloud Scale technology, the Cisco Nexus 9200 platform consists of industry-leading ultra-high-density fixed-configuration data center switches with line-rate Layer 2 and 3 features that support enterprise and commercial applications, service provider hosting, and cloud computing environments. These switches support a wide range of port speeds with flexible combinations of 1/10/25/40/50/100-Gbps connectivity in compact form factors. Using the widely deployed industry-leading Cisco NX-OS Software operating system, the Cisco Nexus 9200 platform is designed for programmable fabric, which offers flexibility, mobility, and scale for service providers and Infrastructure-as-a-Service (IaaS) and cloud providers. It is also designed for the programmable network, which automates configuration and management for customers who want to take advantage of the DevOps operation model and tool sets.

Models

Table 1 summarizes the Cisco Nexus 9200 platform switch models.

Table 1. Cisco Nexus 9200 platform switches

Model	Description
Cisco Nexus 92348GC-X	48p 100M/1G Base-T ports + 4p 1/10/25G SPF28,+2p 40/100G QSFP28
Cisco Nexus 92348GC-FX3	48p 10M/100M/1G Base-T ports + 4p 1/10/25G SPF28,+2p 40/100G QSFP28
Cisco Nexus 92160YC-X Switch	48 x 1/10/25-Gbps SFP+ ports and 6 x QSFP28 ports (4 of the 6 QSFP+ ports are 100Gbps capable ports)*
Cisco Nexus 92300YC Switch	48 x 1/10/25-Gbps SFP+ ports and 18 x 40/100-Gbps QSFP28 ports
Cisco Nexus 9272Q Switch	72 x 40-Gbps QSFP+ ports
Cisco Nexus 92304QC Switch	56 x 40-Gbps QSFP+ ports and 8 x 40/100-Gbps QSFP28 ports
Cisco Nexus 9236C Switch	36 x 40/100-Gbps QSFP28 ports

* Check support and port configuration details in Table 2.

The Cisco Nexus 92348GC-X Switch (see Figure 1) is a 1RU switch based on Cisco Cloud Scale technology and supports 0.696 Tbps of bandwidth and over 517 mpps. The 48 1GBASE-T downlink ports on the 92348GC-X can be configured to work as 100-Mbps, 1-Gbps ports. The 4 ports of SFP28 can be configured as 1/10/25-Gbps and the 2 ports of QSFP28 can be configured as 40- and 100-Gbps ports. The Cisco Nexus 92348GC-X is ideal for big data customers that require a Gigabit Ethernet ToR switch with local switching and for management switch use cases.¹



Figure 1.
Cisco Nexus 92348GC-X Switch

The Cisco Nexus 92160YC-X Switch (Figure 2) is a 1-Rack-Unit (1RU) switch that supports 3.2 Terabits per second (Tbps) of bandwidth and over 2.5 billion packets per second (bps). The 48-port downlink ports on the 92160YC-X can be configured to work as either 1/10/25-Gbps ports, offering deployment flexibility and investment protection. The uplink can support up to four 100-Gbps OR up to six 40-Gbps ports, or a combination of 10-, 25-, 40-, and 100-Gbps connectivity, offering flexible migration options. The switch has FC-FEC enabled for 25Gbps, and supports up to 3m in DAC connectivity. Please check [Cisco Optics Matrix](#) for the most updated support.

The Cisco Nexus 92348GC-X and the 92160YC-X can collect comprehensive Cisco Tetration Analytics telemetry information at line rate across all ports without adding any latency to the packets or negatively affecting switch performance. This telemetry information is exported every 100 milliseconds (ms) by default directly from the switch's Application-Specific Integrated Circuit (ASIC). This information consists of three types of data:

- **Flow information:** This information contains information about endpoints, protocols, ports, when the flow started, how long the flow was active, etc.
- **Interpacket variation:** This information captures any interpacket variations within the flow. Examples include variation in Time To Live (TTL), IP and TCP flags, payload length, etc.
- **Context details:** Context information is derived outside the packet header, including variation in buffer utilization, packet drops within a flow, association with tunnel endpoints, etc.

The Cisco Tetration Analytics platform consumes this telemetry data, and by using unsupervised machine learning and behavior analysis it can provide outstanding pervasive visibility across everything in your data center in real time. By using algorithmic approaches, the Cisco Tetration Analytics platform provides deep insights into applications and interactions, enabling dramatically simplified operations, a zero-trust model, and migration of applications to any programmable infrastructure.

To learn more, go to <https://www.cisco.com/go/tetration>.



Figure 2.
Cisco Nexus 92160YC-X Switch

The Cisco Nexus 9272Q Switch (Figure 3) is an ultra-high-density 2RU switch that supports 5.76 Tbps of bandwidth and over 4.5 bpps across 72 fixed 40-Gbps QSFP+ ports. Up to 35 ports on the 9272Q can be converted into a total of 140 x 10-Gbps ports.



Figure 3.
Cisco Nexus 9272Q Switch

The Cisco Nexus 92304QC Switch (Figure 4) is an ultra-high-density 2RU switch that supports 6.1 Tbps of bandwidth and over 4.8 bpps across 56 x 40-Gbps QSFP+ ports and 8 x 40/100-Gbps QSFP28 ports. Up to 16 ports on the 92304QC can be converted into a total of 64 x 10-Gbps ports.



Figure 4.
Cisco Nexus 92304QC Switch

The Cisco Nexus 9236C Switch (Figure 5) is a 1RU switch that supports 7.2 Tbps of bandwidth and over 5.3 bpps across 36 100-Gbps QSFP28 ports. Each of the ports on the 9236C can be individually configured into 1x100Gbps, 1 x 40 Gbps, 4 x 10/25 Gbps, 2 x 50 Gbps or 1 x 1/10 Gbps using QSA adapter. It provides industry's best density and flexibility needed for data center spine or aggregation connectivity, in a compact form factor.



Figure 5.
Cisco Nexus 9236C Switch

The Cisco Nexus 92300YC Switch (Figure 6) is a top-of-rack switch that supports 6.0 Tbps of bandwidth and over 4.75 bpps across 48 x 1/10/25-Gbps SFP28 and 18 x 40/100-Gbps QSFP28 ports. It is ideal for 25G server access and 1:1 subscription networks, in a compact form factor. Customers can protect their investments by having high-density 25-Gbps and 100-Gbps speeds with flexible topology design. The switch has FC-FEC enabled for 25Gbps, and supports up to 3m in DAC connectivity. Please check [Cisco Optics Matrix](#) for the most updated support.



Figure 6.
Cisco Nexus 92300YC Switch

The Cisco Nexus 92348GC-FX3 Switch (see Figure 7) is a 1RU switch based on Cisco Cloud Scale technology and supports 0.696 Tbps of bandwidth and over 517 mpps. The 48 1GBASE-T downlink ports on the 92348GC-FX3 can be configured to work as 100-Mbps, 1-Gbps ports. The 4 ports of SFP28 can be configured as 1/10/25-Gbps and the 2 ports of QSFP28 can be configured as 40- and 100-Gbps ports. For detail list of features supported on Cisco Nexus 92348GC-FX3 refer to release notes.



Figure 7.
Cisco Nexus 92348GC-FX3 Switch

Features and benefits

The Cisco Nexus 9200 platform provides the following features and benefits:

- High performance and scalability
 - The platform provides wire-rate Layer 2 and 3 switching on all ports, with up to 7.2 Tbps and up to 5.35 bpps of bandwidth.
 - With up to 40 MB of shared buffer, the platform is an excellent choice for scalable data centers and big data applications. The ability to fine tune buffer allocation for non-drop queues makes the Nexus 9200 an ideal platform for IP storage designs.
- Virtual Extensible LAN (VXLAN)
 - The platform (except Cisco Nexus 92348GC-X and Cisco Nexus 92348GC-FX3) offers native line-rate VXLAN routing.
 - The Border Gateway Protocol (BGP) Ethernet Virtual Private Network (EVPN) control plane provides scalable multitenancy and host mobility (refer to [VXLAN Network with MP-BGP EVPN Control Plane](#) for more information).
- Hardware and software high availability
 - The 64-way Equal-Cost Multipath (ECMP) routing enables the use of Layer 3 fat-tree designs. This feature helps organizations prevent network bottlenecks, increase resiliency, and add capacity with little network disruption.
 - Patching ensures undistruptive upgrade in most cases.
 - The switches use hot-swappable Power-Supply Units (PSUs) and fans with N+1 redundancy.
- Purpose-built NX-OS operating system with comprehensive, proven innovations
 - Open programmability supports built-in DevOps automation tools such as [Puppet](#), Chef, and Ansible.
 - Cisco [NX-API](#) supports a common programmatic approach across Cisco Nexus switches.
 - Power-on autoprovisioning (POAP) enables touchless bootup and configuration of the switch, drastically reducing provisioning time.
 - The onboard Python scripting engine enables automation and remote operations in the data center.
 - Advanced buffer monitoring reports real-time buffer utilization per port and per queue, which allows organizations to monitor traffic bursts and application traffic patterns.
 - Complete Layer 3 unicast and multicast routing protocol suites are supported, including BGP, Open Shortest Path First (OSPF), Enhanced Interior Gateway Routing Protocol (EIGRP), Routing Information Protocol Version 2 (RIPv2), Protocol Independent Multicast Sparse Mode (PIM-SM), Source-Specific Multicast (SSM), and Multicast Source Discovery Protocol (MSDP).
 - Segment routing allows the network to forward Multiprotocol Label Switching (MPLS) packets and perform traffic engineering without Resource Reservation Protocol (RSVP) Traffic Engineering (TE). It provides a control-plane alternative for increased network scalability and virtualization.

The Cisco Nexus 9200 platform offers industry-leading density and performance with flexible port configurations that can support existing fiber cabling (Table 2).

Table 2. Cisco Nexus 9200 platform switches' characteristics

Model	Cisco Nexus 92348GC-X	Cisco Nexus 92348GC-FX3	Cisco Nexus 92160YC-X	Cisco Nexus 9272Q	Cisco Nexus 92304QC	Cisco Nexus 9236C	Cisco Nexus 92300YC
Ports	48p 100M/1G Base-T ports + 4p 1/10/25G SPF28,+2p 40/100G QSFP28	48p 10M/100M/1G Base-T ports + 4p 1/10/25G SPF28,+2p 40/100G QSFP28	48 x 10- and 25-Gbps SFP+ and 6 QSFP+ ports (4 are 100-Gbps capable)	72 x 40-Gbps QSFP+ ports	56 x 40-Gbps QSFP+ and 8 100-Gbps ports	36 x 100-Gbps QSFP28 ports	48 x 10- and 25-Gbps SFP+ and 18 100-Gbps ports
Supported speeds	100M, 1 Gbps on Base-T ports and 1, 10, and 25 Gbps on SPF28 ports 40 and 100G Gbps on QSFP28	10M, 100M, 1 Gbps on Base-T ports and 1, 10, and 25 Gbps on SPF28 ports 40 and 100G Gbps on QSFP28	1, 10, and 25 Gbps on SFP+ ports 10, 25, 40, and 100 Gbps on QSFP ports	10 and 40 Gbps	10, 40, and 100 Gbps	1, 10, 25, 40, 50, and 100 Gbps	1, 10, and 25 Gbps on SFP+ ports 40 and 100 Gbps on QSFP ports
Port configuration	48p 100M/1G Base-T ports for downlinks; 1/10/25G for the 4 SFP28 ports 40/100-Gbps for the uplinks	48p 10M/100M/1G Base-T ports for downlinks; 1/10/25G for the 4 SFP28 ports 40/100-Gbps for the uplinks	48 x 10/25-Gbps ports for downlinks; 4 of the 6 uplink ports are 100-Gbps capable. Ports 50 and 52 can be individually configured into 1 x 100 Gbps, 4 x 10 Gbps, 4 x 25 Gbps, 1 x 40 Gbps, or 2 x 50 Gbps.	72 fixed QSFP+ ports, with breakout of up to 140 x 10-Gbps ports	56 fixed QSFP+ ports, with breakout of up to 64 x 10-Gbps ports, plus 8 x 100-Gbps ports	36 fixed QSFP28 ports, with each being individually configured into 1 x 100 Gbps, 4 x 10 Gbps, 4 x 25 Gbps, 1 x 40 Gbps, or 2 x 50 Gbps ports	48 x 10/25-Gbps ports for downlinks; 100-Gbps for the uplinks
Telemetry support	Yes, SW only	Yes, SW only	Yes	–	–	–	–
CPU	4 cores	4 cores	2 cores	4 cores	4 cores	4 cores	2 cores

Model	Cisco Nexus 92348GC-X	Cisco Nexus 92348GC-FX3	Cisco Nexus 92160YC-X	Cisco Nexus 9272Q	Cisco Nexus 92304QC	Cisco Nexus 9236C	Cisco Nexus 92300YC
System memory	8 GB	32 GB	16 GB	16 GB	16 GB	16 GB	16 GB
Solid-State Disk (SSD) drive	16GB	128 GB	64 GB	64 GB	64 GB	64 GB	128 GB
Shared system buffer	40 MB	40 MB	20 MB	30 MB	30 MB	30 MB	30 MB
Management ports	2 ports: 1 RJ-45 and 1SFP	2 ports: 1 RJ-45 and 1SFP	2 ports: 1 RJ-45 and 1SFP	2 ports: 1 RJ-45 and 1SFP	3 RJ-45 ports	3 RJ-45 ports	2 ports: 1 RJ-45 and 1SFP
USB ports	1	1	1	1	1	1	1
RS-232 serial ports	1	1	1	1	1	1	1
Power supplies (PSU - up to 2)	400W AC, 400/350W DC ¹	350W AC port-side intake and port-side exhaust 440W DC port-side intake and port-side exhaust 350W HVAC/HVDC dual direction	650W AC, 930W DC, or 1200W AC/HVDC	930W DC, 1200W AC, or 1200W HVAC/DC	650W AC, 930W DC, or 1200W HVAC/HVDC	930W DC, 650W AC, or 1200W HVAC/DC	650W AC 1200W HVDC (Roadmap)
Typical power* (AC)	150W	226W	10-Gbps mode: 150W 25-Gbps mode: 170W	310W	305W	275W	10G: 216W 25G: 260W
Maximum power* (AC)	245W	242W	475W	975W	720W	640W	603W

¹ 400W/350W DC PSU is compatible only with software versions NXOS-9.3.4 and onwards

Model	Cisco Nexus 92348GC-X	Cisco Nexus 92348GC-FX3	Cisco Nexus 92160YC-X	Cisco Nexus 9272Q	Cisco Nexus 92304QC	Cisco Nexus 9236C	Cisco Nexus 92300YC
Input voltage (AC)	100 to 240V	100 to 240V	100 to 240V	100 to 240V *PSU redundancy is not supported when used in 110V.	100 to 240V	100 to 240V	100 to 240V
Input voltage (HVAC)	200 to 277V	200 to 277V	200 to 277V	200 to 277V	200 to 277V	200 to 277V	200 to 277V
Input voltage (DC)	-40 to -72V DC (minimum and maximum) - 48 to -60V DC (nominal)	-40 to -72V DC (minimum and maximum) - 48 to -60V DC (nominal)	-40 to -72V DC (minimum and maximum) - 48 to -60V DC (nominal)	-40 to -72V DC (minimum and maximum) - 48 to -60V DC (nominal)	-40 to -72V DC (minimum and maximum) - 48 to -60V DC (nominal)	-40 to -72V DC (minimum and maximum) - 48 to -60V DC (nominal)	-40 to -72V DC (minimum and maximum) - 48 to -60V DC (nominal)
Input voltage (HVDC)	192 to 400 VDC, 90 to 295 VAC	240 to 380V	240 to 380V	240 to 380V	240 to 380V	240 to 380V	240 to 380V
Frequency (AC)	50 to 60 Hz	50 to 60 Hz	50 to 60 Hz	50 to 60 Hz	50 to 60 Hz	50 to 60 Hz	50 to 60 Hz
Fans	3	3	4	2	2	4	4
Airflow	Port-side intake and exhaust	Port-side intake and exhaust	Port-side intake and exhaust	Port-side intake and exhaust	Port-side intake and exhaust	Port-side intake and exhaust	Port-side intake and exhaust
MTBF (hours)	474,571	283,670	379,400	397,090	401,060	399,300	365,610
Physical (H x W x D)	1.72 x 17.3 x 18.5 in. (4.4 x 43.9 x 45.7 cm)	1.72 x 17.3 x 19.7 in. (4.4 x 43.9 x 49.9 cm)	1.72 x 17.3 x 22.5 in. (4.4 x 43.9 x 57.1 cm)	3.5 x 17.4 x 24.5 in. (8.9 x 44.2 x 62.3 cm)	3.5 x 17.5 x 22.5 in. (8.9 x 44.5 x 57.1 cm)	1.72 x 17.3 x 22.5 in. (4.4 x 43.9 x 57.1 cm)	2.00 x 17.2 x 22.3 in. (5.08 x 43.8 x 56.6 cm)

Model	Cisco Nexus 92348GC-X	Cisco Nexus 92348GC-FX3	Cisco Nexus 92160YC-X	Cisco Nexus 9272Q	Cisco Nexus 92304QC	Cisco Nexus 9236C	Cisco Nexus 92300YC
Acoustics	71.6 dBA at 50% fan speed, 75.7 dBA at 70% fan speed, and 81.0 dB at 100% fan speed	Port-side exhaust: Fan speed at 40%:60.7dBA Fan speed at 70%:71.9 dBA Fan speed at 100%: 81.6 dBA Port-side intake: Fan speed at 40%:66.1 dBA Fan speed at 70%:73.2 dBA Fan speed at 100%: 79.6 dBA	51.9 dBA at 40% fan speed, 56.2 dBA at 70% fan speed, and 66.0 dB at 100% fan speed	61.2 dBA at 50% fan speed, 69.6 dBA at 70% fan speed, and 78.2 dB at 100% fan speed	57.9 dBA at 40% fan speed, 72.3 dBA at 70% fan speed, and 75.5 dB at 100% fan speed	58.8 dBA at 40% fan speed, 65.3 dBA at 70% fan speed, and 69.6 dB at 100% fan speed	52.1 dBA at 40% fan speed, 62.0 dBA at 70% fan speed, and 71.5 dB at 100% fan speed
RoHS compliance	Yes	Yes	Yes	Yes	Yes	Yes	Yes

* Typical and maximum power values are based on input drawn from the power circuit. The power supply value (for example, 650W AC power supply: NXA-PAC-650W-PI) is based on the output rating to the inside of the switch.

Cisco NX-OS software overview

NX-OS is a purpose-built data center operating system designed for performance, resiliency, scalability, manageability, and programmability at its foundation. It provides a robust and comprehensive feature set that meets the demanding requirements of virtualization and automation in present and future data centers.

The Cisco Nexus 9000 Series uses an enhanced version of NX-OS with a single binary image that supports every switch in the series, simplifying image management. The operating system is modular, with a dedicated process for each routing protocol, a design that isolates faults while increasing availability. In the event of a process failure, the process can be restarted without loss of state. The operating system supports hot and cold patching and online diagnostics.

Main features include the following:

- POAP automates the process of upgrading software images and installing configuration files on Cisco Nexus switches that are being deployed in the network for the first time.
- [NX-API](#) provides operators with a way to manage the switch through Remote Procedure Calls (RPCs; JavaScript Object Notation [JSON] or XML) over HTTP/HTTPS infrastructure.
- Support for customer applications through Python scripting, Bash shell, and Linux containers.
- Patching allows NX-OS to be upgraded and patched without any interruption in switch operations.
- Line-rate overlay support provides VXLAN bridging and routing at full line rate, facilitating and accelerating communication between virtual and physical servers as well as between multiple data centers in a campus environment.
- Network traffic monitoring with Cisco Nexus Data Broker builds simple, scalable, and cost-effective network Test Access Points (TAPs) or Cisco Switched Port Analyzer (SPAN) aggregation for network traffic monitoring and analysis.

Cisco NX-OS features and benefits

The software packaging for the Cisco Nexus 9000 Series offers flexibility and a comprehensive feature set while being consistent with Cisco Nexus access switches. The default system software has a comprehensive Layer 2 security and management feature set. To enable additional functions including Layer 3 IP unicast and IP multicast routing and Cisco Nexus Data Broker, you must install additional licenses. The [licensing guide](#) illustrates the software packaging and licensing available to enable advanced features. For a complete list of supported features, refer to [Cisco Feature Navigator](#).

Software requirements

The Cisco Nexus 9200 platform supports the NX-OS operating system.

For the latest software release information and recommendations, please refer to the product featuring [Cisco NX-OS Solution](#).

Specifications

Table 3 lists the performance and scalability specifications for the Cisco Nexus 9200 platform switches. (Please check the software release notes for feature support information.)

Table 3. Performance and scalability specifications*

Item	Cisco Nexus 92348GC-X Switch	Cisco Nexus 92160YC-X Switch	Cisco Nexus 9272Q Switch Cisco Nexus 92304QC Switch Cisco Nexus 9236C Switch Cisco Nexus 92300YC Switch	Cisco Nexus 92348GC-FX3 Switch
Number of Longest Prefix Match (LPM) routes*	Default: 16,000	Default: 6000	Default: 6000	1,792,000
Number of IP host entries*	Default: 16,000	Default: 96,000	Default: 96,000	1,792,000
Number of MAC address entries*	97,000	92,000	92,000	512,000
Number of multicast routes*	Shipping: 8000	Shipping: 8000 Maximum: 32,000	Shipping: 8000 Maximum: 32,000	128,000
Number of Internet Group Management Protocol (IGMP) snooping groups	Shipping: 8000	Shipping: 8000	Shipping: 8000	32,000
Number of Access Control List (ACL) entries*	Per slice of the forwarding engine: 3000 ingress 2000 egress	Per slice of the forwarding engine: 4000 ingress 2000 egress	Per slice of the forwarding engine: 4000 ingress 2000 egress	Single-slice forwarding engine: 5000 ingress 2000 egress
Maximum number of VLANs	4096**	4096**	4096**	4096**
Number of Virtual Routing and Forwarding (VRF) instances	Shipping: 1000	Shipping: 1000	Shipping: 1000	16,000
Maximum number of links in a port channel	32	32	32	32
Maximum number of ECMP paths	64	64	64	128-way
Maximum number of ECMP groups	256	256	256	256

Item	Cisco Nexus 92348GC-X Switch	Cisco Nexus 92160YC-X Switch	Cisco Nexus 9272Q Switch Cisco Nexus 92304QC Switch Cisco Nexus 9236C Switch Cisco Nexus 92300YC Switch	Cisco Nexus 92348GC-FX3 Switch
Maximum number of ECMP members	64,000	64,000	64,000	64,000
Maximum number of port channels	512	512	512	512
Number of active SPAN sessions	4	4	4	4
Number of VLAN's in Rapid per-VLAN Spanning Tree (RPVST) instances	3967	3967	3967	3967
Number of Hot-Standby Router Protocol (HSRP) groups	490	490	490	490
Number of Multiple Spanning Tree (MST) instances	64	64	64	64
Number of Network Address Translation (NAT) entries	1023	1023	1023	1023

(Shipping: Support in initial software release)

* More templates and scale numbers are on the roadmap. Please refer to [Cisco Nexus 9000 Series Verified Scalability Guide](#) documentation for the latest and exact scalability numbers validated for specific software.

** 127 VLANs out of 4096 are reserved.

Environmental properties

Table 4 lists the environmental properties, and Table 5 lists the weight for the Cisco Nexus 9200 platform switches.

Table 4. Environmental properties

Property	Description
Operating temperature	32 to 104° F (0 to 40° C)
Nonoperating (storage) temperature	-40 to 158° F (-40 to 70° C)
Humidity	5 to 85% (noncondensing)
Altitude	0 to 13,123 ft (0 to 4000m)

Table 5. Weight

Component	Weight
Cisco Nexus 92348GC-X without power supplies or fans	14.12 lb (6.4 kg)
Cisco Nexus 92160YC-X without power supplies or fans	14.12 lb (6.4 kg)
Cisco Nexus 9272Q without power supplies or fans	24.6 lb (11.2 kg)
Cisco Nexus 92304QC without power supplies or fans	25.4 lb (11.5 kg)
Cisco Nexus 9236C without power supplies or fans	18.2 lb (8.3 kg)
Cisco Nexus 92300YC without power supplies or fans	18.6 lb (8.4 kg)
Cisco Nexus 92348GC-FX3 without power supplies or fans	14.5 lb (6.57 kg)
350W AC power supply	2.31 lb (1.0 kg)
400W AC power supply	2.42 lb (1.1 kg)
400W DC power supply	2.2 lb (1 kg)
440W DC power supply	2.64 lb (1.19 kg)
350W HVDC/HVAC power supply	2.64 lb (1.19 kg)
500W HV power supply	2.42 lb (1.1 kg)
1200W AC power supply	2.64 lb (1.2 kg)
650W AC power supply	2.42 lb (1.1 kg)
930W DC power supply	2.42 lb (1.1 kg)
1200W HVDC/HVAC power supply	2.42 lb (1.1 kg)

Component	Weight
Fan tray: N9K-C9300-FAN3 or N9K-C9300-FAN3-B	1.42 lb (0.64 kg)
Fan tray: NXA-FAN-30CFM-F or NXA-FAN-30CFM-B	0.92 lb (0.4 kg)
Fan tray: NXA-FAN-35CFM-PE or NXA-FAN-35CFM-PI	0.92 lb (0.4 kg)
Fan tray: NXA-SFAN-30CFM-PE or NXA-SFAN-30CFM-PI	0.24 lb (0.10 kg)

Regulatory standards compliance

Table 6 summarizes regulatory standards compliance for the Cisco Nexus 9200 platform switches.

Table 6. Regulatory standards compliance: Safety and EMC

Specification	Description
Regulatory compliance	Products should comply with CE Markings according to directives 2004/108/EC and 2006/95/EC
Safety	NEBS <ul style="list-style-type: none"> • UL 60950-1 Second Edition • CAN/CSA-C22.2 No. 60950-1 Second Edition • EN 60950-1 Second Edition • IEC 60950-1 Second Edition • AS/NZS 60950-1 • GB4943
EMC: Emissions	<ul style="list-style-type: none"> • 47CFR Part 15 (CFR 47) Class A • AS/NZS CISPR22 Class A • CISPR22 Class A • EN55022 Class A • ICES003 Class A • VCCI Class A • EN61000-3-2 • EN61000-3-3 • KN22 Class A • CNS13438 Class A
EMC: Immunity	<ul style="list-style-type: none"> • EN55024 • CISPR24 • EN300386 • KN 61000-4 series
RoHS	The product is RoHS-6 compliant with exceptions for leaded-Ball Grid-Array (BGA) balls and lead press-fit connectors

Supported optics modules

For details about the optics modules available and the minimum software release required for each supported module,

visit https://www.cisco.com/en/US/products/hw/modules/ps5455/products_device_support_tables_list.html.

Ordering information

Table 7 presents ordering information for the Cisco Nexus 9200 platform switches.

Table 7. Ordering information

Part Number	Product Description
Base Part Number	
N9K- C92348GC-X	Nexus 9200 with 48p 100M/1G Base-T ports and 4p 1/10/25G SPF28 and 2p 40/100G QSFP28
N9K-C92160YC-X	Nexus 9200 with 48p 1/10G/25G SFP+ and 6p 40G QSFP or 4p 100G QSFP28
N9K-C9272Q	Nexus 9200 with 72p 40G QSFP+
N9K-C92304QC	Nexus 9200 with 56p 40G QSFP+ and 8p 100G QSFP28
N9K-C9236C	Nexus 9200 with 36p 40G 100G QSFP28
N9K-C92300YC	Nexus 9200 with 48p 10/25 Gbps and 18p 100G QSFP28
N9K-C92348GC-FX3	Nexus 9200 with 48p 100M/1GT, 4p 10/25G SFP28 and 2p 40/100G QSFP28 ports
Power Supplies	
NXA-PAC-650W-PI	Nexus 9000 650W AC PS, Port-side Intake
NXA-PAC-650W-PE	Nexus 9000 650W AC PS, Port-side Exhaust
NXA-PAC-1200W-PI	Nexus 9000 1200W AC PS, Port-side Intake
NXA-PAC-1200W-PE	Nexus 9000 1200W AC PS, Port-side Exhaust
N2200-PAC-400W	N2K/3K 400W AC PS, Port-side Exhaust
N2200-PAC-400W-B	N2K/3K 400W AC PS, Port-side Intake
N2200-PDC-400W**	N2K/3K 400W DC PS, Port-side Exhaust
N2200-PDC-350W-B**	Nexus 2K and 3K Reverse Airflow DC Power Supply
UCSC-PSU-930WDC	Nexus 9000 930W DC PS, Port-side Intake
UCS-PSU-6332-DC	Nexus 9000 930W DC PS, Port-side Exhaust
N9K-PUV-1200W	Nexus 9300 1200W Universal Power Supply, Bi-directional air flow and Supports AC/HVDC
NXA-PHV-350W-PI	Cisco Nexus 9300 350W power supply, supports HVAC/HVDC, port side intake

Part Number	Product Description
NXA-PHV-350W-PE	Cisco Nexus 9300 350W power supply, supports HVAC/HVDC, port side exhaust
NXA-PAC-350W-PE2	Cisco Nexus 9000 350W AC PS, port-side exhaust
NXA-PAC-350W-PI2	Cisco Nexus 9000 350W AC PS, port-side intake
NXA-PDC-440W-PI	Cisco Nexus 9000 930W DC PS, port-side intake
NXA-PDC-440W-PE	Cisco Nexus 9000 930W DC PS, port-side exhaust
FAN	
N9K-C9300-FAN3	Nexus 9K Fixed Fan for 2RU switch, Port-side Intake
N9K-C9300-FAN3-B	Nexus 9K Fixed Fan for 2RU switch, Port-side Exhaust
NXA-FAN-30CFM-F	Nexus 2K/3K/9K Single Fan for 1RU switch, port side exhaust airflow
NXA-FAN-30CFM-B	Nexus 2K/3K/9K Single Fan for 1RU switch, port side intake airflow
NXA-FAN-35CFM-PE	Nexus 92300 Single Fan, port side exhaust airflow
NXA-FAN-35CFM-PI	Nexus 92300 Single Fan, port side exhaust airflow
NXA-SFAN-30CFM-PE	Cisco Nexus fan, 30CFM, port-side exhaust airflow
NXA-SFAN-30CFM-PI	Cisco Nexus fan, 30CFM, port-side intake airflow
Software	
N93-LAN1K9	Enhanced L3 including full OSPF, EIGRP, BGP for Nexus 9200/9300 Platform
NX-OS-ES-XF	NX-OS Essential SW license for a 10/25/40G+ Nexus 9K Leaf
NX-OS-AD-XF	NX-OS Advantage SW license for a 10/25/40G+ Nexus 9K Leaf
Power Cords	
CAB-250V-10A-AR	AC Power Cord - 250V, 10A - Argentina (2.5 meter)
CAB-250V-10A-BR	AC Power Cord - 250V, 10A - Brazil (2.1 meter)
CAB-250V-10A-CN	AC Power Cord - 250V, 10A - PRC (2.5 meter)
CAB-250V-10A-ID	AC Power Cord - 250V, 10A, South Africa (2.5 meter)
CAB-250V-10A-IS	AC Power Cord - 250V, 10A - Israel (2.5 meter)
CAB-9K10A-AU	Power Cord, 250VAC 10A 3112 Plug, Australia (2.5 meter)
CAB-9K10A-EU	Power Cord, 250VAC 10A CEE 7/7 Plug, EU (2.5 meter)
CAB-9K10A-IT	Power Cord, 250VAC 10A CEI 23-16/VII Plug, Italy (2.5 meter)

Part Number	Product Description
CAB-9K10A-SW	Power Cord, 250VAC 10A MP232 Plug, SWITZ (2.5 meter)
CAB-9K10A-UK	Power Cord, 250VAC 10A BS1363 Plug (13 A fuse), UK (2.5 meter)
CAB-9K12A-NA	Power Cord, 125VAC 13A NEMA 5-15 Plug, North America (2.5 meter)
CAB-AC-L620-C13	North America, NEMA L6-20-C13 (2.0 meter)
CAB-C13-C14-2M	Power Cord Jumper, C13-C14 Connectors, 2 Meter Length (2 meter)
CAB-C13-CBN	Cabinet Jumper Power Cord, 250 VAC 10A, C14-C13 Connectors (0.7 meter)
CAB-IND-10A	10A Power cable for India (2.5 meter)
CAB-N5K6A-NA	Power Cord, 200/240V 6A North America (2.5 meter)
CAB-HVAC-SD-0.6M	HVAC Power cable for Anderson-LS-25
CAB-HVAC-RT-0.6M	HVAC Power cable with right angle connector for RF-LS-25
Accessories	
NXK-ACC-KIT-1RU	Nexus 3K/9K Fixed Accessory Kit, 1RU front and rear removal
N3K-C3064-ACC-KIT	Nexus 3K/9K Fixed Accessory Kit
N9K-C9300-ACK	Nexus 9K Fixed Accessory Kit
N9K-C9300-RMK	Nexus 9K Rack Fixed Mount Kit

* Available only on Cisco Nexus 92160YC-X.

** 400W/350W DC PSU is compatible only with software versions NXOS-9.3.4 and onwards

Warranty

The Cisco Nexus 9200 platform has a 1-year limited hardware warranty. The warranty includes hardware replacement with a 10-day turnaround from receipt of a Return Materials Authorization (RMA).

Cisco environmental sustainability

Information about Cisco’s environmental sustainability policies and initiatives for our products, solutions, operations, and extended operations or supply chain is provided in the “Environment Sustainability” section of Cisco’s [Corporate Social Responsibility](#) (CSR) Report.

Reference links to information about key environmental sustainability topics (mentioned in the “Environment Sustainability” section of the CSR Report) are provided in the following table:

Sustainability topic	Reference
Information on product material content laws and regulations	Materials
Information on electronic waste laws and regulations, including products, batteries, and packaging	WEEE compliance

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Service and support

Cisco offers a range of professional, solution, and product support services for each stage of your Cisco Nexus 9200 deployment:

- Cisco Data Center Quick Start Service for Cisco Nexus 9000 Series Switches: This offering provides consulting services that include technical advice and assistance to help deploy Cisco Nexus 9000 Series Switches.
- Cisco Data Center Accelerated Deployment Service for Cisco Nexus 9000 Series Switches: This service delivers planning, design, and implementation expertise to bring your project into production. The service also provides recommended next steps, an architectural high-level design, and operation-readiness guidelines to scale the implementation to your environment.
- Cisco Migration Service for Cisco Nexus 9000 Series Switches: This service helps you migrate from Cisco Catalyst 6000 Series Switches to Cisco Nexus 9000 Series Switches.
- Cisco Product Support: Support service is available globally 24 hours a day, 7 days a week, for Cisco software and hardware products and technologies associated with Cisco Nexus 9000 Series Switches. Enhanced support options delivered by Cisco also include solution support for Cisco Application Centric.

For more information, visit <https://www.cisco.com/go/services>.

* For Cisco products only.

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For more information

For more information about the Cisco Nexus 9000 Series and latest software release information and recommendations, please visit <https://www.cisco.com/go/nexus9000>.

Document history

New or revised topic	Described In	Date
Added N9K 92348GC-FX3	Where appropriate	October 1, 2024
Updated N9K 92348GC-FX3	Where appropriate	April, 2025

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