

# Cisco Nexus 9300 Platform Leaf Switches for Cisco Application Centric Infrastructure

## Product Overview

Cisco® [Application Centric Infrastructure](#) (Cisco ACI™) in the data center is a holistic architecture with centralized automation and policy-based application profiles. Cisco ACI provides a robust transport network for today's dynamic workloads. Cisco ACI is built on a network fabric that combines time-tested protocols with new innovations to create a highly flexible, scalable, and resilient architecture of low-latency, high-bandwidth links. This fabric delivers a network that can support the most demanding and flexible data center environments.

The Cisco ACI fabric is designed from the foundation to support emerging industry demands while maintaining a migration path for architecture already in place. The fabric is designed to support the industry move to management automation, programmatic policy, and dynamic “workload-anywhere” models. The Cisco ACI fabric accomplishes this with a combination of hardware, policy-based control systems, and software closely coupled to provide advantages not possible in other models.

The Cisco ACI fabric consists of three major components:

- Cisco Application Policy Infrastructure Controller (APIC)
- Spine switches
- Leaf switches

These three components handle both the application of network policy and the delivery of packets. Cisco Nexus® 9000 Series Switches support Cisco ACI, and organizations can use them as spine or leaf switches to take full advantage of an automated, policy-based, systems management approach.

The Cisco Nexus 9300 platform leaf switches for Cisco ACI are fixed-port switches designed for top-of-rack (ToR) and middle-of-row (MoR) deployment in data centers that support enterprise applications, service provider hosting, and cloud computing environments. These Layer 2 and 3 nonblocking switches support 10 and 40 Gigabit Ethernet and Fibre Channel over Ethernet (FCoE) with up to 2.56 terabits per second (Tbps) of internal bandwidth.

## Models

Table 1 lists the Cisco Nexus 9300 platform switches that support Cisco ACI.

**Table 1.** Cisco Nexus 9300 Platform Leaf Switches for Cisco ACI

| Model                       | Description  |
|-----------------------------|--|
| Cisco Nexus 9332PQ Switch   | 32 x 40-Gbps Quad Enhanced Small Form-Factor Pluggable (QSFP+) ports |
| Cisco Nexus 9372PX-E Switch | 48 x 1/10-Gbps SFP+ and 6 x 40-Gbps QSFP+ ports                      |
| Cisco Nexus 9372TX-E Switch | 48 x 100M/1/10GBASE-T and 6 x 40-Gbps QSFP+ ports                    |
| Cisco Nexus 9372PX Switch   | 48 x 1/10-Gbps SFP+ and 6 x 40-Gbps QSFP+ ports                      |
| Cisco Nexus 9372TX Switch   | 48 x 100M/1/10GBASE-T and 6 x 40-Gbps QSFP+ ports                    |
| Cisco Nexus 9396PX Switch   | 48 x 1/10-Gbps SFP+ and up to 12 x 40-Gbps QSFP+ ports               |
| Cisco Nexus 9396TX Switch   | 48 x 100M/1/10-G BASE-T and up to 12 x 40-Gbps QSFP+ ports           |
| Cisco Nexus 93120TX Switch  | 96 x 100M/1/10GBASE-T and 6 x 40-Gbps QSFP+ ports                    |
| Cisco Nexus 93128TX Switch  | 96 x 100M/1/10GBASE-T and up to 8 x 40-Gbps QSFP+ ports              |

The Cisco Nexus 9332PQ Switch is a 1-rack-unit (1RU) switch that supports 2.56 Tbps of bandwidth and over 720 million packets per second (mpps) across 32 fixed 40-Gbps QSFP+ ports (Figure 1).

**Figure 1.** Cisco Nexus 9332PQ Switch



The Cisco Nexus 9372PX Switch is a 1RU switch that supports 1.44 Tbps of bandwidth and over 1150 mpps across 48 fixed 10-Gbps SFP+ ports and 6 fixed 40-Gbps QSFP+ ports. The Cisco Nexus 9372PX-E Switch (Figure 2) is a minor hardware revision of the Cisco Nexus 9372PX. Enhancements include hardware capability for IP-based endpoint group (EPG) classification in Cisco ACI mode.

**Figure 2.** Cisco Nexus 9372PX-E Switch



The Cisco Nexus 9372TX Switch is a 1RU switch that supports 1.44 Tbps of bandwidth and over 1150 mpps across 48 fixed 100M/1/10-Gbps BASE-T ports and 6 fixed 40-Gbps QSFP+ ports. The Cisco Nexus 9372TX-E Switch (Figure 3) is a minor hardware revision of the Cisco Nexus 9372TX. Enhancements include hardware capability for IP-based EPG classification in Cisco ACI mode.

**Figure 3.** Cisco Nexus 9372TX-E Switch



The Cisco Nexus 9396PX Switch is a 2RU switch that supports 1.92 Tbps of bandwidth and over 1500 mpps across 48 fixed 10-Gbps SFP+ ports and an uplink module (see Figures 10 and 11 later in this document) that can support up to 12 fixed 40-Gbps QSFP+ ports (Figure 4).

**Figure 4.** Cisco Nexus 9396PX Switch



The Cisco Nexus 9396TX Switch is a 2RU switch that supports up to 1.92 Tbps of bandwidth and over 1500 mpps across 48 fixed 100M/1/10GBASE-T ports and an uplink module (see Figures 9 and 10 later in this document) that can support up to 12 fixed 40-Gbps QSFP+ ports (Figure 5).

**Figure 5.** Cisco Nexus 9396TX Switch



The Cisco Nexus 93128TX Switch is a 3RU switch that supports 2.56 Tbps and over 750 mpps across 96 fixed 100M/1/10GBASE-T ports and an uplink module (see Figures 9 and 10 later in this document) that can support up to 8 fixed 40-Gbps QSFP ports (Figure 6).

**Figure 6.** Cisco Nexus 93128TX Switch



The Cisco Nexus 93120TX Switch is a 2RU switch that supports 2.4 Tbps and over 750 mpps across 96 fixed 100M/1/10GBASE-T ports and 6 fixed 40-Gbps QSFP ports (Figure 7).

**Figure 7.** Cisco Nexus 93120TX Switch



The 40-Gbps ports for the Cisco Nexus 9396PX, 9396TX, and 93128TX are provided on an uplink module that can be serviced and replaced by the user. Three uplinks modules are available for Cisco Nexus 9300 platform leaf switches for Cisco ACI.

With the Cisco Nexus 9000 Series, organizations can quickly and easily upgrade existing data centers to carry 40 Gigabit Ethernet to the spine through advanced and cost-effective optics that enables the use of existing 10 Gigabit Ethernet fiber (a pair of multimode fiber strands). Please visit the [Cisco 40GBASE QSFP modules data sheet](#) for more details.

## Features and Benefits

The Cisco Nexus 9300 platform switches are high-density, nonblocking, low-power-consuming switches that are designed to work well in leaf-and-spine deployment in enterprise data centers, service provider facilities, and large virtualized and cloud computing environments.

The platform offers industry-leading density and performance and capabilities with flexible port configurations that can support existing copper and fiber cabling (Tables 2 and 3). With 1/10GBASE-T support, the platform can deliver 10 Gigabit Ethernet over existing copper, enabling a low-cost upgrade from Cisco Catalyst® 6500 Series Switches when used in an MoR or end-of-row (EoR) configuration.

**Table 2.** Specifications for Cisco Nexus 9300 Platform Leaf Switches for Cisco ACI

| Model                                  | Cisco Nexus 9332PQ   | Cisco Nexus 9372PX and 9372PX-E   | Cisco Nexus 9372TX and 9372TX-E   | Cisco Nexus 93120TX   |
|--|--|---|---|---|
| <b>Ports</b>                           | 32 QSFP+ ports   | 48 fixed 1/10-Gbps SFP+ and 6 QSFP+ ports   | 48 fixed 1/10GBASE-T and 6 QSFP+ ports  | 96 fixed 1/10GBASE-T and 6 QSFP+ ports                            |
| <b>Supported speeds</b>                | 40 Gigabit Ethernet  | 1/10 Gigabit Ethernet   | 100 Megabit Ethernet and 1/10 Gigabit Ethernet                                      | 100 Megabit Ethernet and 1/10 Gigabit Ethernet                    |
| <b>40 Gigabit Ethernet uplink port</b> | -  | 6 fixed QSFP+ ports   | 6 fixed QSFP+ ports   | 6 fixed QSFP+ ports   |
|  | The switch offers 25 MB of additional packet buffer space shared with all ports for more resilient operations. |   |   |   |
| <b>CPU</b>                             | Dual-core 2.5-GHz x86 CPU  | Dual-core 2.5-GHz x86 CPU   | Dual-core 2.5-GHz x86 CPU   | Dual-core 2.5-GHz x86 CPU   |
| <b>System memory</b>                   | 16 GB  | 16 GB   | 16 GB   | 16 GB   |
| <b>SSD drive</b>                       | 64 GB  | 64 GB   | 64 GB   | 64 GB   |
| <b>Power supplies (up to 2)</b>        | 650W AC and 930W DC  | 650W AC and 930W DC   | 650W AC and 930W DC   | 650W AC and 930W DC   |
| <b>Typical power* (AC)</b>             | 228W   | 210W  | 374.5W  | 542W  |
| <b>Maximum power* (AC)</b>             | 508W   | 537W  | 694W  | 948W  |
| <b>Input voltage (AC)</b>              | 100 to 240V  | 100 to 240V   | 100 to 240V   | 100 to 240V<br>*PSU redundancy is not supported when used in 110V |
| <b>Input voltage (DC)</b>              | -40V to -72V DC (min-max)<br>-48V to -60V DC (nominal)   | -40V to -72V DC (min-max)<br>-48V to -60V DC (nominal)                              | -40V to -72V DC (min-max)<br>-48V to -60V DC (nominal)                              | -40V to -72V DC (min-max)<br>-48V to -60V DC (nominal)            |
| <b>Frequency (AC)</b>                  | 50 to 60 Hz  | 50 to 60 Hz   | 50 to 60 Hz   | 50 to 60 Hz   |
| <b>Fans</b>                            | 4  | 4   | 4   | 2   |
| <b>Physical</b>                        | 1.72 x 17.3 x 22.5 in.   | 1.72 x 17.3 x 22.5 in.  | 1.72 x 17.3 x 22.5 in.  | 3.5 x 17.5 x 22.5 in.   |
| <b>(H x W x D)</b>                     | (4.4 x 43.9 x 57.1 cm)   | (4.4 x 43.9 x 57.1 cm)  | (4.4 x 43.9 x 57.1 cm)  | 8.9 x 44.5 x 57.1 cm  |
| <b>Acoustics</b>                       | 49.1 dBA at 40% fan speed, 65.6 dBA at 70% fan speed, and 78.5 dB at 100% fan speed                            | 48.5 dBA at 40% fan speed, 64.9 dBA at 70% fan speed, and 77.8 dB at 100% fan speed | 48.6 dBA at 40% fan speed, 65.2 dBA at 70% fan speed, and 76.5 dB at 100% fan speed |   |
| <b>RoHS compliance</b>                 | Yes  | Yes   | Yes   | Yes   |

**Table 3.** Specifications for Cisco Nexus 9300 Platform Leaf Switches for Cisco ACI

| Model   | Cisco Nexus 9396PX  | Cisco Nexus 9396TX  | Cisco Nexus 93128TX   |
|---|---|---|---|
| <b>Ports</b>  | 48 fixed SPF+ ports   | 48 fixed 1/10GBASE-T ports  | 96 fixed 1/10GBASE-T ports  |
| <b>Supported speeds</b>                             | 1/10 Gigabit Ethernet speeds  | 100 megabit and 1/10 Gigabit Ethernet speeds  | 100 megabit and 1/10 Gigabit Ethernet speeds  |
| <b>40 Gigabit Ethernet uplink module (required)</b> | 6 or 12 QFSP+ ports active through the uplink module                                | 6 or 12 QFSP+ ports active through the uplink module                                | 6 or 8 QSFP+ ports active through the uplink module   |
| <b>CPU</b>  | Dual-core 2.5-GHz x86 CPU   | Dual-core 2.5-GHz x86 CPU   | Dual-core 2.5-GHz x86 CPU   |
| <b>System memory</b>                                | 16 GB   | 16 GB   | 16 GB   |
| <b>SSD drive</b>                                    | 64 GB   | 64 GB   | 64 GB   |
| <b>Power supplies (up to 2)</b>                     | 650W AC and 930W DC   | 650W AC and 930W DC   | 1200W AC and 930W DC  |
| <b>Typical power* (AC)</b>                          | 204W  |   | <ul style="list-style-type: none"> <li>432W (1 Gbps)</li> <li>568W (10 Gbps)</li> </ul>   |
| <b>Maximum power* (AC)</b>                          | 455W  |   | <ul style="list-style-type: none"> <li>739W (1 Gbps)</li> <li>853W (10 Gbps)</li> </ul>   |
| <b>Input voltage (AC)</b>                           | 100 to 240V   | 100 to 240V   | <ul style="list-style-type: none"> <li>100 to 120V (maximum output: 800W)</li> <li>200 to 240V (maximum output: 1200W)</li> </ul> |
| <b>Input voltage (DC)</b>                           | -40V to -72V DC (min-max)<br>-48V to -60V DC (nominal)                              | -40V to -72V DC (min-max)<br>-48V to -60V DC (nominal)                              | -40V to -72V DC (min-max)<br>-48V to -60V DC (nominal)  |
| <b>Frequency (AC)</b>                               | 50 to 60Hz  | 50 to 60Hz  | 47 to 63Hz  |
| <b>Fan Trays</b>                                    | 3   | 3   | 3   |
| <b>Physical (H x W x D)</b>                         | 3.5 x 17.5 x 22.5 in.<br>(8.9 x 44.5 x 57.1 cm)                                     | 3.5 x 17.5 x 22.5 in.<br>(8.9 x 44.5 x 57.1 cm)                                     | 5.3 x 17.5 x 22.5 in.<br>(13.3 x 44.5 x 57.1 cm)  |
| <b>Acoustics</b>                                    | 68.3 dBA at 40% fan speed, 78.8 dBA at 70% fan speed, and 84.5 dB at 100% fan speed | 68.3 dBA at 40% fan speed, 78.8 dBA at 70% fan speed, and 84.5 dB at 100% fan speed | 71.4 dBA at 40% fan speed, 80.2 dBA at 70% fan speed, and 85.7 dB at 100% fan speed   |
| <b>RoHS compliance</b>                              | 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: N9K-PAC-650W) is based on the output rating toward the inside of the switch.

Table 4 summarizes the features and benefits of the Cisco Nexus 9300 platform.

**Table 4.** Features of Cisco Nexus 9300 Platform Leaf Switches for Cisco ACI

| Feature                                  | Benefit   |
|--|---|
| <b>Predictable high performance</b>      | Low latency with up to 3.6 Tbps of bandwidth enables customers to build a robust switch fabric scaling from as few as 200 10-Gbps server ports to more than 200,000 10-Gbps server ports.   |
| <b>Increased integrated buffer space</b> | Up to a total of 50 MB of integrated shared buffer space allows better management of speed mismatch between access and uplink ports.  |
| <b>Designed for availability</b>         | Hot-swappable, redundant power supplies and fan trays increase availability.  |
| <b>Flexible airflow configuration</b>    | Both port-side intake and port-side exhaust airflow configurations are supported.   |
| <b>Power efficiency</b>                  | All Cisco Nexus 9000 Series power supplies are 80 Plus Platinum rated, providing at least 90% efficiency with 20% utilization.  |
| <b>Advanced optics</b>                   | Cisco offers a pluggable 40 Gigabit Ethernet QSFP+ transceiver that enables customers to use existing 10 Gigabit Ethernet data center cabling to support 40 Gigabit Ethernet connectivity. This technology facilitates adoption of 40 Gigabit Ethernet with no cable infrastructure upgrade cost. |

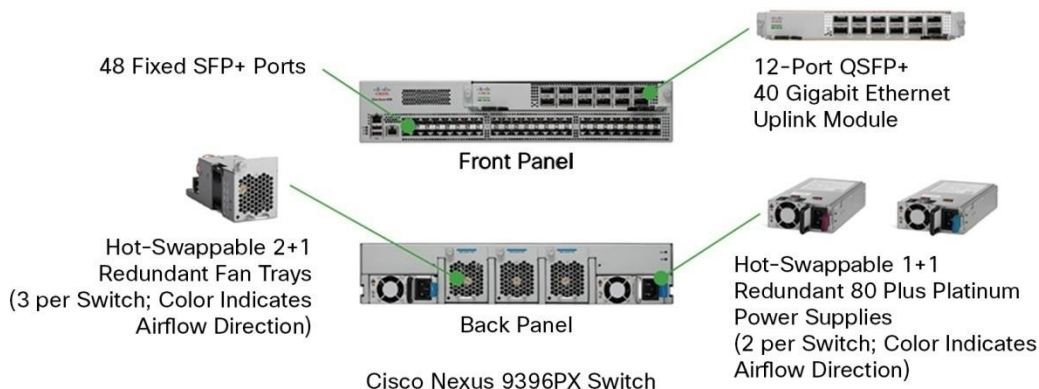
## Power and Cooling

The switches are designed to adapt to any data center hot-aisle and cold-aisle configuration. The switches can be installed with ports facing the rear, simplifying cabling of server racks by putting the ports closest to the servers they support. The switches can be installed with the ports facing the front, simplifying the upgrade of existing racks of switches in which network cables are wired to the front of the rack. The two deployment modes support front-to-back cooling through a choice of power supplies and fan trays designed with opposite airflow directions, denoted by red and blue tabs (Figure 7).

These two deployment modes are available with AC power supplies. Additionally, DC power supply UCSC-PSU-930WDC (with port-side intake) can be used for deployments with -48 to -60V DC power. For high-voltage AC or DC environments, customers can also choose the N9K-PUV-1200W, which supports either 200-277V AC or -200 to -380V DC and both airflow directions in one power supply unit.

To enhance availability, the platform supports 1+1 redundant hot-swappable 80 Plus Platinum-certified power supplies and hot swappable N+1 redundant fan trays.

**Figure 8.** Cisco Nexus 9300 Platform Components



## Cisco Nexus 9300 Platform Uplink Module

The Cisco Nexus 9396PX, 9396TX, and 93128TX require an uplink module to be installed for normal switch operation that can be serviced and replaced by the user. Two uplink module options are available.

The Cisco Nexus M6PQ and M6PQ-E uplink module provides up to 6 QSFP+ ports for 40 Gigabit Ethernet connectivity to spine-layer switches (Figure 8). The uplink module provides 6 active ports when installed in the Cisco Nexus 93128TX, 9396TX, and 9396PX. Cisco Nexus M6PQ-E is a minor hardware revision of Cisco Nexus M6PQ. Enhancements include hardware capability for IP-based EPG classification in Cisco ACI mode.

**Figure 9.** Cisco Nexus M6PQ-E 6-Port QSFP+ Uplink Card



The Cisco Nexus M12PQ uplink module provides up to 12 QSFP+ ports for 40 Gigabit Ethernet connectivity to spine-layer switches (Figure 9). The uplink module provides 8 active ports when installed in the Cisco Nexus 93128TX, and 12 active ports when installed in the Cisco Nexus 9396PX and 9396TX.

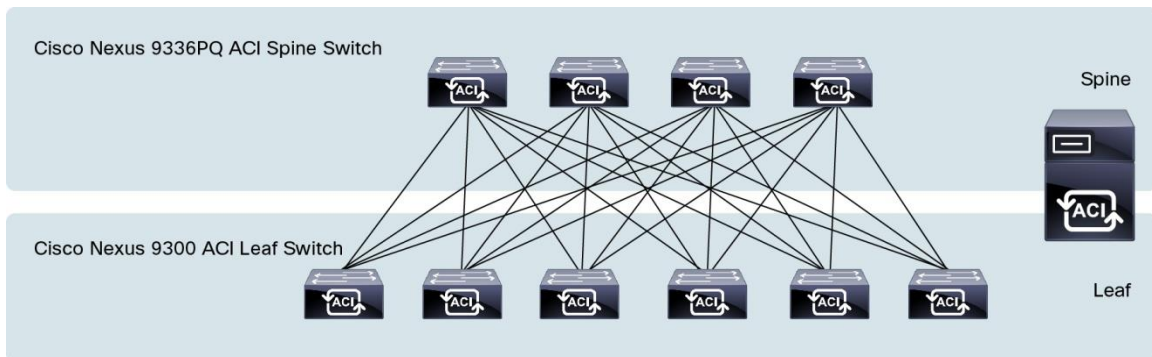
**Figure 10.** Cisco Nexus M12PQ 12-Port QSFP+ Uplink Card



## Cisco Nexus 9300 Platform Leaf Switch Deployment Scenarios for Cisco ACI

Cisco Nexus 9300 platform leaf switches along with Cisco Nexus 9000 Series spine switches enable an automated and policy-based Cisco ACI architecture (Figure 10). The high level of redundancy in leaf-and-spine architectures delivers increased availability with highly flexible workload placement.

**Figure 11.** Cisco Nexus 9300 Platform Leaf-and-Spine Architecture for Cisco ACI



The Cisco Nexus 9300 platform leaf switches can operate as data center ToR switches or as MoR and EoR data center access-layer switches deployed with or without Cisco fabric extender technology.

## Software Requirements

The Cisco Nexus 9300 platform leaf switches run on Cisco ACI software on a 64-bit Linux kernel (Release 3.4.10) with a single binary image that supports both Cisco ACI modular spine switches (Cisco Nexus 9500 platform) and fixed-port switches (Cisco Nexus 9300 platform). The software image is based on Cisco ACI Release 11.0. The single image incorporates both the Linux kernel and Cisco ACI software so that the switch can be booted through a standard Linux kickstart process.

For the latest software release information and recommendations, please refer to the product bulletin at <https://www.cisco.com/go/aci> and [Cisco Feature Navigator](#).

## Environmental Properties

Table 5 lists the environmental properties of the Cisco Nexus 9300 platform switches, and Table 6 lists the weights of Cisco Nexus 9300 platform switches.

**Table 5.** Environmental Properties

| Property                                  | Cisco Nexus 9300 Platform   |
|---|-----------------------------|
| <b>Operating temperature</b>              | 32 to 104°F (0 to 40°C)     |
| <b>Nonoperating (storage) temperature</b> | -40 to 158°F (-40 to 70°C)  |
| <b>Humidity</b>                           | 5 to 95% (noncondensing)    |
| <b>Altitude</b>                           | 0 to 13,123 ft (0 to 4000m) |

**Table 6.** Weight

| Component  | Weight             |
|--|--------------------|
| Cisco Nexus 9396PX without power supplies, fans, or uplink module  | 22.45 lb (10.2 kg) |
| Cisco Nexus 9396TX without power supplies, fans, or uplink module  | 22.45 lb (10.2 kg) |
| Cisco Nexus 9372PX/9372PX-E without power supplies or fans         | 22.2 lb (10.1 kg)  |
| Cisco Nexus 9372TX/9372TX-E without power supplies or fans         | 22.6 lb (10.25 kg) |
| Cisco Nexus 9332PQ without power supplies or fans                  | 22 lb (9.7 kg)     |
| Cisco Nexus 93128TX without power supplies, fans, or uplink module | 32.56 lb (14.8 kg) |
| Cisco Nexus 93120TX without power supplies, fans, or uplink module | 26 lb (11.8 kg)    |
| 650W AC power supply   | 2.42 lb (1.1 kg)   |
| 1200W AC power supply  | 2.64 lb (1.2kg)    |
| Fan tray: N9K-C9300-FAN2/N9K-C9300-FAN2-B                          | 1.14 lb (0.5kg)    |
| 930W DC power supply   | 2.42 lb (1.1 kg)   |
| 1200W HVDC/HVAC power supply                                       | 2.42 lb (1.1 kg)   |
| Cisco Nexus M6PQ/M6PQ-E uplink module (1 per switch)               | 2.0 lbs/0.9 Kg)    |
| Cisco Nexus M12PQ uplink module (1 per switch)                     | 3.12 lb (1.4kg)    |

## Regulatory Standards Compliance

Table 7 summarizes regulatory standards compliance for the Cisco Nexus 9300 platform.

**Table 7.** Regulatory Standards Compliance: Safety and EMC

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



## Supported Optics pluggable

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

[https://www.cisco.com/en/US/products/hw/modules/ps5455/products\\_device\\_support\\_tables\\_list.html](https://www.cisco.com/en/US/products/hw/modules/ps5455/products_device_support_tables_list.html).

## Ordering Information

Table 8 presents ordering information for the Cisco Nexus 9300 platform. Note that you can order the Cisco Nexus 2000 Series Fabric Extenders either separately or along with the Cisco Nexus 9300 platform.

**Table 8.** Ordering Information

| Part Number  | Product Description   |
|--|---|
| <b>Hardware</b>                                    |   |
| <b>N9K-C9396PX</b>                                 | Nexus 9300 with 48p 1/10G SFP+ and 12p 40G QSFP   |
| <b>N9K-C9396TX</b>                                 | Nexus 9300 with 48p 1/10G-T and 8p 40G QSFP   |
| <b>N9K-C93128TX</b>                                | Nexus 9300 with 96p 1/10G-T and 8p 40G QSFP   |
| <b>N9K-C93120TX</b>                                | Nexus 9300 with 96p 1/10G-T and 6p 40G QSFP   |
| <b>N9K-C9372PX-E</b>                               | Nexus 9300 with 48p 1/10G SFP+ and 6p 40G QSFP+   |
| <b>N9K-C9372TX-E</b>                               | Nexus 9300 with 48p 1/10G-T and 6p 40G QSFP+  |
| <b>N9K-C9372PX</b>                                 | Nexus 9300 with 48p 1/10G SFP+ and 6p 40G QSFP+   |
| <b>N9K-C9372TX</b>                                 | Nexus 9300 with 48p 1/10G-T and 6p 40G QSFP+  |
| <b>N9K-C9332PQ</b>                                 | Nexus 9300 with 32p 40G QSFP  |
| <b>N9K-M6PQ-E</b>                                  | Uplink Module for Nexus 9300, 6p 40G QSFP   |
| <b>N9K-M6PQ</b>                                    | Uplink Module for Nexus 9300, 6p 40G QSFP   |
| <b>N9K-M12PQ</b>                                   | Uplink Module for Nexus 9300, 12p 40G QSFP  |
| <b>N9K-PAC-650W</b>                                | Nexus 9300 650W AC PS, Port-side Intake   |
| <b>N9K-PAC-650W-B</b>                              | Nexus 9300 650W AC PS, Port-side Exhaust  |
| <b>N9K-PAC-1200W</b>                               | Nexus 9300 1200W AC PS, Port-side Intake  |
| <b>N9K-PAC-1200W-B</b>                             | Nexus 9300 1200W AC PS, Port-side Exhaust   |
| <b>NXA-PAC-650W-PI</b>                             | Nexus 9000 650W AC PS, Port-side Intake, NEBs complaint                                 |
| <b>NXA-PAC-650W-PE</b>                             | Nexus 9000 650W AC PS, Port-side Exhaust, NEBs complaint                                |
| <b>NXA-PAC-1200W-PI</b>                            | Nexus 9000 1200W AC PS, Port-side Intake, NEBs complaint                                |
| <b>NXA-PAC-1200W-PE</b>                            | Nexus 9000 1200W AC PS, Port-side Exhaust, NEBs complaint                               |
| <b>UCSC-PSU-930WDC</b>                             | 930W DC PS, Port-side Intake  |
| <b>UCS-PSU-6332-DC</b>                             | Nexus 9000 930W DC PS, Port-side Exhaust  |
| <b>N9K-PUV-1200W</b>                               | Nexus 9300 1200W Universal Power Supply, Bi-directional air flow and Supports HVAC/HVDC |
| <b>N9K-C9300-FAN2</b>                              | Nexus 9300 Fan 2, Port-side Intake  |
| <b>N9K-C9300-FAN2-B</b>                            | Nexus 9300 Fan 2, Port-side Exhaust   |
| <b>NXA-FAN-30CFM-F</b>                             | Nexus 9332 & 9372 Fan, Forward airflow (Port-side Exhaust)                              |
| <b>NXA-FAN-30CFM-B</b>                             | Nexus 9332 & 9372 Fan, Reverse airflow (Port-side Intake)                               |
| <b>Cisco APIC Leaf Software Licenses</b>           |   |
| <b>ACI-N9K-48X</b>                                 | ACI SW license for a 48p 1/10G Nexus 9K   |
| <b>ACI-N9K-96X</b>                                 | ACI SW license for a 96p 1/10G Nexus 9K   |
| <b>ACI-N9K-32Q</b>                                 | ACI SW license for a 32p 40G Nexus 9K   |
| <b>Cisco ACI Fabric Extender Software Licenses</b> |   |

| Part Number                                   | Product Description  |
|---|--|
| <b>ACI-F48X</b>                               | ACI SW license for a 48p 1/10G Nexus 2K                                |
| <b>ACI-F32X</b>                               | ACI SW license for a 32p 1/10G Nexus 2K                                |
| <b>ACI-F16X</b>                               | ACI SW license for a 16p 1/10G Nexus B22 FEX                           |
| <b>ACI-F48G</b>                               | ACI SW license for a 48p 1G Nexus 2K                                   |
| <b>Cisco Application Virtual Switch (AVS)</b> |  |
| <b>ACI-AVS-48</b>                             | ACI Software License for AVS: 48 Instances                             |
| <b>ACI-AVS-96</b>                             | ACI Software License for AVS: 96 Instances                             |
| <b>Power Cords</b>                            |  |
| <b>CAB-250V-10A-AR</b>                        | AC Power Cord - 250V, 10A - Argentina (2.5 meter)                      |
| <b>CAB-250V-10A-BR</b>                        | AC Power Cord - 250V, 10A - Brazil (2.1 meter)                         |
| <b>CAB-250V-10A-CN</b>                        | AC Power Cord - 250V, 10A - PRC (2.5 meter)                            |
| <b>CAB-250V-10A-ID</b>                        | AC Power Cord - 250V, 10A, South Africa (2.5 meter)                    |
| <b>CAB-250V-10A-IS</b>                        | AC Power Cord - 250V, 10A - Israel (2.5 meter)                         |
| <b>CAB-9K10A-AU</b>                           | Power Cord, 250VAC 10A 3112 Plug, Australia (2.5 meter)                |
| <b>CAB-9K10A-EU</b>                           | Power Cord, 250VAC 10A CEE 7/7 Plug, EU (2.5 meter)                    |
| <b>CAB-9K10A-IT</b>                           | Power Cord, 250VAC 10A CEI 23-16/VII Plug, Italy (2.5 meter)           |
| <b>CAB-9K10A-SW</b>                           | Power Cord, 250VAC 10A MP232 Plug, SWITZ (2.5 meter)                   |
| <b>CAB-9K10A-UK</b>                           | Power Cord, 250VAC 10A BS1363 Plug (13 A fuse), UK (2.5 meter)         |
| <b>CAB-9K12A-NA</b>                           | Power Cord, 125VAC 13A NEMA 5-15 Plug, North America (2.5 meter)       |
| <b>CAB-AC-L620-C13</b>                        | North America, NEMA L6-20-C13 (2.0 meter)                              |
| <b>CAB-C13-C14-2M</b>                         | Power Cord Jumper, C13-C14 Connectors, 2 Meter Length (2 meter)        |
| <b>CAB-C13-C14-AC</b>                         | Power cord, C13 to C14 (recessed receptacle), 10A (3 meter)            |
| <b>CAB-C13-CBN</b>                            | Cabinet Jumper Power Cord, 250 VAC 10A, C14-C13 Connectors (0.7 meter) |
| <b>CAB-IND-10A</b>                            | 10A Power cable for India (2.5 meter)                                  |
| <b>CAB-N5K6A-NA</b>                           | Power Cord, 200/240V 6A North America (2.5 meter)                      |
| <b>Accessories</b>                            |  |
| <b>N9K-C9300-ACK</b>                          | Nexus 9300 Accessory Kit   |
| <b>N9K-C9300-RMK</b>                          | Nexus 9300 Rack Mount Kit  |
| <b>N3K-C3064-ACC-KIT</b>                      | Nexus 3K/9K Accessory Kit  |

## Warranty

The Cisco Nexus 9300 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).

## Service and Support

Cisco offers a wide range of services to help accelerate your success in deploying and optimizing the Cisco Nexus 9300 platform in your data center. The innovative Cisco Services offerings are delivered through a unique combination of people, processes, tools, and partners and are focused on helping you increase operation efficiency and improve your data center network. Cisco Advanced Services use an architecture-led approach to help you align your data center infrastructure with your business goals and achieve long-term value. Cisco SMARTnet™ Service helps you resolve mission-critical problems with direct access at any time to Cisco network experts and award-winning resources.

With this service, you can take advantage of the Cisco Smart Call Home service capability, which offers proactive diagnostics and real-time alerts on your Cisco Nexus 9300 platform. Spanning the entire network lifecycle, Cisco

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Services offerings help increase investment protection, optimize network operations, support migration operations, and strengthen your IT expertise.

### Cisco Capital Financing to Help You Achieve Your Objectives

Cisco Capital<sup>®</sup> financing can help you acquire the technology you need to achieve your objectives and stay competitive. We can help you reduce capital expenditures (CapEx), accelerate your growth, and optimize your investment dollars and ROI. Cisco Capital financing gives you flexibility in acquiring hardware, software, services, and complementary third-party equipment. And there's just one predictable payment. Cisco Capital financing is available in more than 100 countries. [Learn more.](#)

### For More Information

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



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