

# Cisco Nexus 9300 Series Switches NX-OS Mode

#### **Product Overview**

Organizations everywhere recognize that changing application environments are creating new demands for the IT infrastructure that supports them. Application workloads are deployed across a mix of virtualized and nonvirtualized server and storage infrastructure, requiring a network infrastructure that provides consistent connectivity, security, and visibility across a range of bare-metal, virtualized, and cloud computing environments:

- Application instances are created dynamically. As a result, the provisioning, modification, and removal of application network connectivity needs to be dynamic as well.
- Business units' demand accelerated application deployments. IT departments have to provide shared IT
  infrastructure to address time-to-market needs and to increase their return on investment (ROI).
- With organizations deploying a mix of custom, open source, and off-the-shelf commercial applications, IT departments must manage both security and quality of service (QoS) for environments that support multitenancy.
- Applications have been transitioning over time to a less monolithic, scale-out, multinode model. IT
  infrastructure that supports this model must scale with the speed of business and support both 10 and 40
  Gigabit Ethernet connectivity.

The Cisco Nexus<sup>®</sup> 9000 Series Switches include both modular and fixed-port switches that are designed to overcome these challenges with a flexible, agile, low-cost, application centric infrastructure (ACI).

The Cisco Nexus 9300 Series Switches comprises of 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. Cisco Nexus 9300 Series Switches are Layer 2 and 3 nonblocking 10 and 40 Gigabit Ethernet and Fibre Channel over Ethernet (FCoE)-capable switches with up to 2.56 terabits per second (Tbps) of internal bandwidth.

#### Models

Table 1. Cisco Nexus 9300 Series Switches

Model	Description	
Cisco Nexus 9396PX Switch	48x1/10Gbps SFP+ and 12x40Gbps QSFP+ ports	
Cisco Nexus 9396TX Switch	48x1/10G BASE-T and 12x40Gbps QSFP+ ports	
Cisco Nexus 93128TX Switch	96x1/10G BASE-T and 8x40Gbps QSFP+ ports	

The Cisco Nexus 9396PX Switch is a 2-rack-unit (2RU) switch that supports 1.92 Tbps of bandwidth across 48 fixed 10-Gbps SFP+ ports and 12 fixed 40-Gbps QSFP+ ports (Figure 1).

Figure 1. Cisco Nexus 9396PX Switch



The Cisco Nexus 9396TX Switch is a 2RU switch that supports 1.92 Tbps of bandwidth across 48 fixed 1/10GBASE-T ports and 12 fixed 40-Gbps QSFP+ ports (Figure 2).

Figure 2. Cisco Nexus 9396TX Switch



The Cisco Nexus 93128TX Switch is a 3RU switch that supports 2.56 Tbps across 96 fixed 1/10GBASE-T ports and 8 fixed 40-Gbps QSFP ports (Figure 3).

Figure 3. Cisco Nexus 93128TX Switch



The 40-Gbps ports for Cisco Nexus 9396PX, 9396TX and 93128TX are provided on an uplink module that can be serviced and replaced by the user. The uplink module is the same for all switches; If used with the Cisco Nexus 93128TX, 8 out of the 12x40Gbps QSFP+ ports will be available.

With the Cisco Nexus 9000 Series, organizations can quickly and easily upgrade existing data centers to carry 40 Gigabit Ethernet to the aggregation layer or to the spine (in a leaf-and-spine configuration) through advanced and cost effective optics that enable the use of existing 10 Gigabit Ethernet fiber (a pair of multimode fiber strands). Please visit Cisco 40G BASE QSFP Modules data sheet for more details.

Cisco provides two modes of operation for the Cisco Nexus 9000 Series. Organizations can use Cisco<sup>®</sup> NX-OS Software to deploy the Cisco Nexus 9000 Series in standard Cisco Nexus switch environments. Organizations also can use the ACI-ready hardware infrastructure to take full advantage of an automated, policy-based, systems management approach.

#### Features and Benefits

The Cisco Nexus 9300 series switches are high-density, nonblocking, low-power-consuming switches designed for ToR, MoR, or EoR deployment in enterprise data centers, service provider facilities, and large virtualized and cloud computing environments.

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

Table 2. Cisco Nexus 9300 Series Switches Characteristics

Model	Cisco Nexus 9396PX	Cisco Nexus 9396TX	Cisco Nexus 93128TX	
Ports	48 fixed SPF+ ports	48 fixed 1/10GBASE-T ports	96 fixed 1/10GBASE-T ports	
Supported Speeds	1Gb/10Gb Ethernet speeds	100Mb/1Gb/10Gb Ethernet speeds	100Mb/1Gb/10Gb Ethernet speeds	
12-port 40 Gigabit Ethernet uplink module	12 QFSP+ ports active	12 QFSP+ ports active	8 QSFP+ ports active	
(required)	<ul> <li>Provides 40Gb Ethernet connectivity for uplinks to aggregation or spine switches; advanced QSFP+ optics enable connectivity using existing 10 Gigabit Ethernet fiber</li> <li>Provides 40 MB additional packet buffer space shared with all ports for more resilient operation</li> </ul>			
Power supplies (up to 2)	650W	650W	1200W	
Typical power	204W	296W(1G) 427W(10G)	432W(1G) 568W(10G)	
Maximum power	455W	472W(1G) 712W(10G)	739W(1G) 853W(10G)	
Input voltage	100-240V	100-240V	100-120V (max output 800W), 200-240V (max output 200W)	
Frequency	50-60Hz	50-60Hz	47-63Hz	
Fans	3	3	3	
Physical (H x W x D)	3.5 x 17.5 x 22.5 in. (8.9 x 44.5 x 57.1 cm)	3.5 x 17.5 x 22.5 in. (8.9 x 44.5 x 57.1 cm)	5.3 x 17.5 x 22.5 in. (13.3 x 44.5 x 57.1 cm)	
Acoustics	68.3 dBA at 40% fan speed, 78.8 dBA at 70% fan speed, 84.5 dB at 100% fan speed	68.3 dBA at 40% fan speed, 78.8 dBA at 70% fan speed, 84.5 dB at 100% fan speed	71.4 dBA at 40% fan speed, 80.2 dBA at 70% fan speed, 85.7 dB at 100% fan speed	
RoHS compliance	Yes	Yes	Yes	

 Table 3.
 Cisco Nexus 9300 Series Switches Capabilities

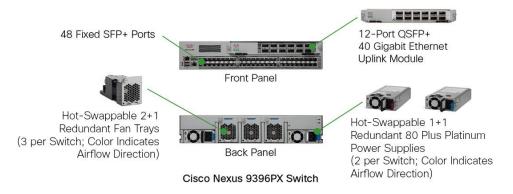
Capability	Benefit
Predictable high performance	Latency of 1 to 2 microseconds with up to 1.28 Tbps of bandwidth enables customers to build a robust switch fabric scaling from as few as 200 10-Gbps server ports to more than 200,000 10-Gbps server ports.
Increased integrated buffer space	Total of 50 MB of integrated shared buffer space to better manage speed mismatch between access and uplink ports.
Designed for availability	Hot-swappable, redundant power supplies and fan trays increase availability.
Flexible airflow configuration	Support for both port-side intake and port-side exhaust airflow configurations.
Power efficiency	All Cisco Nexus 9000 Series power supplies are 80 Plus Platinum rated.
Advanced optics	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 (see Figure 4).

To enhance availability, the platform supports 1+1 redundant hot-swappable 80 Plus Platinum-certified power supplies and hot swappable 2+1 redundant fan trays.

Figure 4. Cisco Nexus 9300 Series Switch Components



#### Cisco Nexus 9300 Series Uplink Module

The Cisco Nexus 9300 platform requires an uplink module to be installed for normal switch operation. The Cisco Nexus M12PQ uplink module provides up to 12 QSFP+ ports for 40 Gigabit Ethernet connectivity to servers or aggregation-layer switches (Figure 5). As specified earlier in Table 1, 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. The 40 Gigabit ports on the uplink module does not support the break-out mode of 4 10 Gigabit ports but can be converted to a single 10 Gigabit port through the QSA adapter.

Figure 5. Cisco Nexus M12PQ 12-Port QSFP+ Uplink Card



#### **Deployment Scenarios**

The Cisco Nexus 9300 series switch is a versatile data center switching platform with switches that can operate as ToR data center switches, as MoR/EoR access-layer switches deployed with or without Cisco fabric extender technology, and as leaf switches in horizontally scaled leaf-and-spine architectures.

#### **Top-of-Rack Data Center Switch**

The Cisco Nexus 9300 platform is designed to suit a ToR design with the increased port density, deep integrated buffer space, and performance.

With its 48 fixed ports, the Cisco Nexus 9396PX and 9396TX has enough ports to support the densest 1RU server configurations. A pair of these switches can support redundant connectivity to each server in a rack with ports to spare. In the configuration shown in Figure 6, the 480 Gbps of uplink capacity from each switch is sufficient to provide full 10-Gbps bandwidth to each server with no oversubscription.

The Cisco Nexus 9300 series switch can support multiple racks (or pods) of dense 1RU servers. For example, the 96-port Cisco Nexus 93128TX can provide 10 Gigabit Ethernet connectivity to all servers across two racks, with a pair of these switches providing full redundancy. In less dense configurations with 2RU servers, the Cisco Nexus 9300 platform can support even more racks of servers in a MoR configuration.

12 x 40-Gbps Uplinks
per Switch

Cisco Nexus
9396PX Switches

Cisco Nexus
93128TX Switches

High-Density
Server Racks

Figure 6. Cisco Nexus 9300 Series Switch in ToR Configurations

#### **End-of-Row Access-Layer Switch**

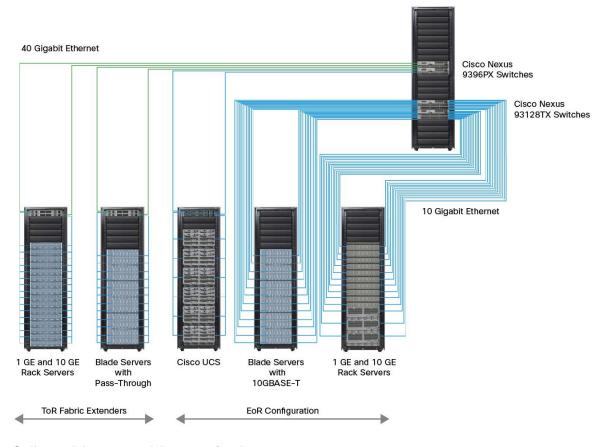
In addition to being an excellent ToR switch, Cisco Nexus 9300 series switches can be configured as MoR/EoR access-layer switches. They can connect to almost any blade or rack server through 1 and 10 Gigabit Ethernet connections including the following (Figure 7):

One Pair of Switches

- Third-party and standalone Cisco Unified Computing System<sup>™</sup> (Cisco UCS<sup>®</sup>) rack servers
- Third-party blade server chassis with chassis-resident switches or pass-through devices
- Cisco UCS

The Cisco Nexus 9396PX can be used to connect both 10 and 40 Gigabit Ethernet-equipped fabric extenders, Cisco Nexus B22 Blade Fabric Extenders in Dell and HP blade chassis (not shown), and 10 Gigabit Ethernet-equipped servers and systems such as Cisco UCS. The Cisco Nexus 9396TX and 93128TX provide excellent connectivity for large numbers 10 Gigabit Ethernet-equipped blade or rack servers equipped with 10GBASE-T ports.

Figure 7. Cisco Nexus 9300 Series Switches as an EoR Access-Layer Switches with and without Cisco Fabric Extender Technology



#### **Collapsed Access and Aggregation Layers**

Figure 8 shows how the Cisco Nexus 9300 series switch supports Cisco Nexus 2000 Series Fabric Extenders to establish a centrally managed yet physically distributed collapsed access- and aggregation-layer switch. Although each fabric extender resides physically at the top of each rack or within each blade server chassis, each device is handled as a remote line card of the Cisco Nexus 9300 series switch, yielding massive scalability through flexible bandwidth oversubscription but with only a single point of management.

Using Cisco Nexus 2000 Series Fabric Extenders at the top of each rack reduces the cabling complexity, overall power consumption, and number of management points. This approach facilitates a "rack and roll" deployment model in which individual server racks can be prewired using ToR fabric extenders, with the only connections required to bring them into the data center being network uplink and power connections.

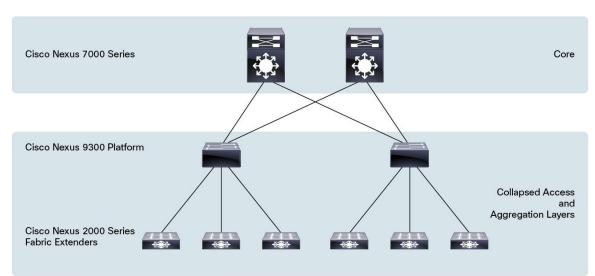
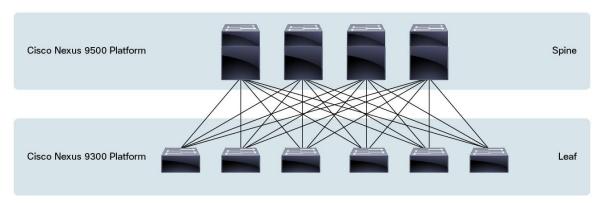


Figure 8. Collapsed Access and Aggregation Layers with Cisco Fabric Extenders

#### Leaf-and-Spine Architecture

Cisco Nexus 9300 series switches are excellent choices for leaf switches in a leaf-and-spine architecture (Figure 9). The Layer 3 capabilities established by both Cisco Nexus 9500 and 9300 platforms enable the two to be used with Equal-Cost Multipath (ECMP) routing to accelerate the flow of traffic and reduce reconvergence time in the event of a failure. The degree of redundancy in leaf-and-spine architectures delivers increased availability with a high level of flexibility in workload placement.

Figure 9. Cisco Nexus 9300 and 9500 Platforms in a Leaf-and-Spine Architecture



### Cisco NX-OS Software Overview

Cisco NX-OS is a data center purpose-built operating system designed for performance, resiliency, scalability, manageability, and programmability at its foundation. Cisco NX-OS 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 Cisco NX-OS Software 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 losing state. The operating system supports In-Service Software Upgrade (ISSU), hot and cold patching, and online diagnostics.

Main switch features include the following:

- Power-On Auto Provisioning (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.
- Intelligent Application Programming Interface (iAPI) provides operators with a way to manage the switch through remote procedure calls (RPCs; JavaScript Object Notation [JSON] or XML) over HTTP/HTTPS infrastructure.
- Patching allows the Cisco NX-OS software to be upgraded and patched without any interruption in switch operations.
- Line-rate overlay support provides Virtual Extensible LAN (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.

#### 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 and base level Layer 3 feature set. To enable advanced Layer 3 IP Unicast and IP Multicast routing functions, you must install additional licenses. Table 3 lists the software packaging and licensing available to enable advanced features.

Table 4. Software Packaging and Licensing

Packaging	Chassis Based	Part Number	Supported Features
Cisco Nexus 9300 Enhanced Layer 3 license	Chassis	N93-LAN1K9	Layer 3 including full OSPF, Enhanced Interior Gateway Routing Protocol (EIGRP), Border Gateway Protocol (BGP), and VXLAN
Cisco Data Center Network Manager (DCNM) license	Chassis	DCNM-LAN-N93-K9	Cisco DCNM license for Cisco Nexus 9300 platform

For details about the NX-OS features and benefits, visit Cisco Nexus 9500 and 9300 Series Switches NX-OS Software Data Sheet at <a href="http://www.cisco.com/c/en/us/products/collateral/switches/nexus-9000-series-switches/datasheet-c78-732091.html">http://www.cisco.com/c/en/us/products/collateral/switches/nexus-9000-series-switches/datasheet-c78-732091.html</a>

#### Software Requirements

The Cisco Nexus 9000 Series supports Cisco NX-OS Software Release 6.1 and later. Cisco NX-OS interoperates with any networking operating system, including Cisco IOS<sup>®</sup> Software, that conforms to the networking standards described in this data sheet.

The Cisco Nexus 9000 Series runs Cisco NX-OS on a 64-bit Linux kernel (Release 3.4.10) with a single binary image that supports both modular (Cisco Nexus 9500 series) and fixed-port (Cisco Nexus 9300 series) switches. The software image is based on Cisco-NX-OS Software Release 6.1(2). The single image incorporates both the Linux kernel and Cisco NX-OS 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 <a href="http://www.cisco.com/go/nexus9000">http://www.cisco.com/go/nexus9000</a>.

## **Specifications**

Table 5 lists the specifications for the Cisco Nexus 9300 series switches. (Please check software release notes for feature support information.)

## Performance and Scalability

 Table 5.
 Product Specifications

Item	Cisco Nexus 9300 series
Maximum number of longest prefix match (LPM) routes	16,000
Maximum number of IP host entries	88,000
Maximum number of MAC address entries	96,000
Number of multicast routes	<ul><li>32k (without virtual PortChannel [vPC])</li><li>32k (with vPC)</li></ul>
Number of Interior Gateway Management Protocol (IGMP) snooping groups	• 32k (without vPC) • 32k (with vPC)
Maximum number of Cisco Nexus 2000 Series Fabric Extenders per switch	16 <sup>*</sup>
Number of access control list (ACL) entries	• 4000 ingress • 1000 egress
Maximum number of VLANs	4096
Maximum number of Virtual Routing and Forwarding (VRF) instances	1000
Maximum number of links in a PortChannel	32
Maximum number of ECMP paths	64
Maximum number of PortChannels	528
Number of active Switched Port Analyzer (SPAN) sessions	4
Maximum number of Rapid per-VLAN Spanning Tree (RPVST) instances	507
Maximum number of Hot Standby Router Protocol (HSRP) groups	490
Maximum number of Multiple Spanning Tree (MST) instances	64
Maximum number of tunnel endpoints (VTEP) and VXLAN physical servers (per VLAN)	256

Support post FCS via software upgrade, please check the release notes for latest update

## **Environmental propoerties**

Table 6 lists the environmental properties and table 7 lists the weight of Cisco Nexus 9300 series switches.

 Table 6.
 Environmental Properties

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

Table 7. Weight

Component	Weight
Cisco Nexus 9396PX without power supplies, fans, uplink module	22.45 lb (10.2 kg)
Cisco Nexus 9396TX without power supplies, fans, uplink module	22.45 lb (10.2 kg)
650W AC power supply - N9K-PAC-650W/ N9K-PAC-650W-B	2.42 lb (1.1 kg)
Fan tray 1- N9K-C9300-FAN1/ N9K-C9300-FAN1-B	0.92 lb (0.4 kg)
Cisco Nexus 93128TX without power supplies, fans, uplink module	32.56 lb (14.8 kg)
1200W AC power supply - N9K-PAC-1200W/ N9K-PAC-1200W-B	2.64 lb (1.2kg)
Fan tray 2 - N9K-C9300-FAN2/ N9K-C9300-FAN2-B	1.14 lb (0.5kg)
Cisco Nexus M12PQ uplink module (1 per switch)	3.12 lb (1.4kg)

## Regulatory Standards Compliance

Table 8 summarizes regulatory standards compliance for the Cisco Nexus 9300 series switches.

 Table 8.
 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	<ul> <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>
EMC: Emissions	<ul> <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>
EMC: Immunity	<ul> <li>EN55024</li> <li>CISPR24</li> <li>EN300386</li> <li>KN 61000-4 series</li> </ul>
RoHS	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 optical modules available and the minimum software release required for each supported optical module, visit

http://www.cisco.com/en/US/products/hw/modules/ps5455/products\_device\_support\_tables\_list.html .

## **Ordering Information**

Table 9 presents ordering information for the Cisco Nexus 9300 series switches. Note that you can order the Cisco Nexus 2000 platform fabric extenders either separately or along with the Cisco Nexus 9300 series switch. Ordering Information

 Table 9.
 Ordering Information

Part Number	Product Description
Hardware	
N9K-C9396PX	Nexus 9300 with 48p 1/10G SFP+ and 12p 40G QSFP
N9K-C9396TX	Nexus 9300 with 48p 1/10G-T and 8p 40G QSFP
N9K-C93128TX	Nexus 9300 with 96p 1/10G-T and 8p 40G QSFP
N9K-C9396PX-BA-L3	Nexus 9396, 960G switch, 12p 40G uplinks, cold air intake, Enh. L3 license
N9K-C9396PX-FA-L3	Nexus 9396, 960G switch, 12p 40G uplinks, hot air exhaust, Enh. L3 license
N9K-C93128TX-BA-L3	Nexus 93128, 1,280G switch, 8p 40G uplinks, cold air intake, Emh. L3 license
N9K-C93128TX-FA-L3	Nexus 93128, 1,280G switch, 8p 40G uplinks, hot air exhaust, Enh. L3 license
N9K-M12PQ	Uplink Module for Nexus 9300, 12p 40G QSFP
N9K-PAC-650W	Nexus 9300 650W AC PS, Port-side Intake
N9K-PAC-650W-B	Nexus 9300 650W AC PS, Port-side Exhaust
N9K-PAC-1200W	Nexus 9300 1200W AC PS, Port-side Intake
N9K-PAC-1200W-B	Nexus 9300 1200W AC PS, Port-side Exhaust
N9K-C9300-FAN2	Nexus 9300 Fan 2, Port-side Intake
N9K-C9300-FAN2-B	Nexus 9300 Fan 2, Port-side Exhaust
Software	
N93-LAN1K9	Enhanced L3 including full OSPF, EIGRP, BGP
DCNM-LAN-N93-K9	DCNM license for Nexus 9300 Series
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)
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)

Part Number	Product Description	
CAB-C13-C14-AC	Power cord, C13 to C14 (recessed receptacle), 10A (3 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)	
Accessories		
N9K-C9300-ACK=	Nexus 9300 Accessory Kit	
N9K-C9300-RMK=	Nexus 9300 Rack Mount Kit	

### Warranty

The Cisco Nexus 9300 series switch 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 series switch 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 uses an architecture-led approach to help you align your data center infrastructure with your business goals and achieve long-term value. Cisco SMARTnet<sup>®</sup> 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 Services offerings help increase investment protection, optimize network operations, support migration operations, and strengthen your IT expertise.

#### For More Information

For more information about the Cisco Nexus 9000 platform and latest software release information and recommendations, please visit <a href="http://www.cisco.com/go/nexus9000">http://www.cisco.com/go/nexus9000</a>.



Americas Headquarters Cisco Systems, Inc. San Jose, CA Asia Pacific Headquarters Cisco Systems (USA) Pte. Ltd. Singapore Europe Headquarters Cisco Systems International BV Amsterdam, The Netherlands

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at www.cisco.com/go/offices.

Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, go to this URL: www.cisco.com/go/trademarks. Third party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1110R)

Printed in USA C78-729405-02 07/14