Cisco Nexus 9300-EX Series Switches

Contents

Product overview

The Cisco Nexus® 9300-EX Series switches belongs to the fixed Cisco Nexus 9000 platform based on Cisco Cloud Scale technology. The platform support cost-effective cloud-scale deployments, an increased number of endpoints, and cloud services. The platform is built on modern system architecture designed to provide high performance and meet the evolving needs of highly scalable data centers and growing enterprises.

Cisco Nexus 9300-EX series switches offer a variety of interface options to transparently migrate existing data centers from 100-Mbps, 1-Gbps, and 10-Gbps speeds to 25-Gbps at the server, and from 10- and 40-Gbps speeds to 50- and 100-Gbps at the aggregation layer. The platforms provide investment protection for customers, delivering large buffers, highly flexible Layer 2 and Layer 3 scalability, and performance to meet the changing needs of virtualized data centers and automated cloud environments.

Cisco provides two modes of operation for Cisco Nexus 9000 Series Switches. Organizations can use Cisco NX-OS Software to deploy the switches in standard Cisco Nexus switch environments (NX-OS mode). Organizations can also deploy the infrastructure that is ready to support the Cisco Application Centric Infrastructure (Cisco ACI™) platform to take full advantage of an automated, policy-based, systems-management approach (ACI mode).

Switch models

Table 1. Cisco Nexus 9300-EX Series Switches

Model	Description
Cisco Nexus 93180YC-EX	48 x 1/10/25-Gbps fiber ports and 6 x 40/100-Gbps Quad Small Form-Factor Pluggable 28 (QSFP28) ports
Cisco Nexus 93108TC-EX	48 x 100M/1/10GBASE-T ports and 6 x 40/100-Gbps QSFP28 ports
Cisco Nexus 93180LC-EX	Up to 32 x 40/50-Gbps QSFP+ ports OR 18 x 100-Gbps QSFP28 ports

The Cisco Nexus 93180YC-EX Switch (Figure 1) is a 1-Rack-Unit (1RU) switch with latency of less than 1 microsecond that supports 3.6 Terabits per second (Tbps) of bandwidth and over 2.6 billion packets per second (bpps). The 48 downlink ports on the 93180YC-EX can be configured to work as 1-, 10-, or 25-Gbps ports, offering deployment flexibility and investment protection. The uplink can support up to six 40- and 100-Gbps ports, or a combination of 1-, 10-, 25-, 40-, 50, and 100-Gbps connectivity, offering flexible migration options. The switch has FC-FEC enabled for 25Gbps, and supports upto 3m in DAC connectivity. Please check Cisco Optics Matrix for the most updated support.

Figure 1.
Cisco Nexus 93180YC-EX Switch

The Cisco Nexus 93108TC-EX Switch (Figure 2) is a 1RU switch that supports 2.16 Tbps of bandwidth and over 1.6bpps. The 48 10GBASE-T downlink ports on the 93108TC-EX can be configured to work as 100-Mbps, 1 Gbps, or 10-Gbps ports. The uplink can support up to six 40- and 100-Gbps ports, or a combination of 1-, 10-, 25-, 40, 50-, and 100-Gbps connectivity, offering flexible migration options.

Figure 2.
Cisco Nexus 93108TC-EX Switch

The Cisco Nexus 93180LC-EX Switch is the industry's first 50-Gbps-capable 1RU switch that supports 3.6 Tbps of bandwidth and over 2.6 bpps across up to 32 fixed 40- and 50-Gbps QSFP+ ports or up to 18 fixed 100-Gbps ports (Figure 3). The switch can support up to 72 10-Gbps ports using breakout cables. A variety of flexible port configurations are supported using templates.

Figure 3.
Cisco Nexus 93180LC-EX Switch

Features and benefits

The Cisco Nexus 9300-EX series provide the following features and benefits:

- **Architectural Flexibility**
  - Industry leading Software Defined Networking Solution Cisco ACI™ support.
  - Support for standards based VXLAN EVPN fabrics, inclusive of hierarchical multi-site support (refer to VXLAN Network with MP-BGP EVPN Control Plane for more information).
  - Three-tier BGP architectures, enabling horizontal, non-blocking IPv6 network fabrics at web-scale.
  - Segment routing allows the network to forward Multiprotocol Label Switching (MPLS) packets and engineer traffic without Resource Reservation Protocol (RSVP) Traffic Engineering (TE). It provides a control-plane alternative for increased network scalability and virtualization.
  - Comprehensive protocol support for Layer 3 (v4/v6) unicast and multicast routing protocol suites, 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).

- **Extensive Programmability**
  - Day zero automation through Power On Auto Provisioning, drastically reducing provisioning time.
  - Industry leading integrations for leading devops configuration management applications – Ansible, Chef, Puppet, SALT. Extensive Native YANG and industry standard OpenConfig model support through RESTCONF/NETCONF.
  - Pervasive API's for all switch CLI functions (JSON based RPC over HTTP/HTTPs).
- **High Scalability, flexibility**
  - Flexible forwarding tables support up to 1 million shared entries on EX models. Flexible use of TCAM space allows for custom definition of Access Control List (ACL) templates.
- **Intelligent Buffer Management**
  - The platform offers Cisco's innovative intelligent buffer management, that offers capability to distinguish mice and elephant flows and apply different queue management schemes to them based on their network forwarding requirements in the event of link congestion.
  - Intelligent buffer management functions are:
    - Approximate Fair Dropping (AFD) with Elephant trap (ETRAP). AFD distinguishes long-lived elephant flows from short-lived mice flows, by using ETRAP. AFD exempts mice flows from the dropping algorithm so that mice flows will get their fair share of bandwidth without being starved by bandwidth-hungry elephant flows. Also, AFD tracks elephant flows and subjects them to the AFD algorithm in the egress queue to grant them their fair share of bandwidth.
    - ETRAP measures the byte counts of incoming flows and compares this against the user defined ETRAP threshold. After a flow crosses the threshold, it becomes an elephant flow.
    - Dynamic Packet Prioritization (DPP) provides the capability of separating mice flows and elephant flows into two different queues so that buffer space can be allocated to them independently. Mice flows, sensitive to congestion and latency can take priority queue and avoid re-ordering that allows to elephant flows to take full link bandwidth.
- **Hardware and software high availability**
  - Virtual Port-Channel (vPC) technology provides Layer 2 multipathing through the elimination of Spanning Tree Protocol. It also enables fully utilized bisectional bandwidth and simplified Layer 2 logical topologies without the need to change the existing management and deployment models.
  - 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.
  - Advanced reboot capabilities include hot and cold patching.
  - The switches use hot-swappable Power-Supply Units (PSUs) and fans with N+1 redundancy.

- **Purpose-built Cisco NX-OS Software operating system with comprehensive, proven innovations**
  - Single binary image that supports every switch in the Cisco Nexus 9000 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.
  - Data Center Network Manager (DCNM) is the network management platform for all NX-OS-enabled deployments, spanning new fabric architectures, IP Fabric for Media, and storage networking deployments for the Cisco Nexus®-powered data center. Accelerate provisioning from days to minutes, and simplify deployments from day zero through day N. Reduce troubleshooting cycles with graphical operational visibility for topology, network fabric, and infrastructure. Eliminate configuration errors and automate ongoing change in a closed loop, with templated deployment models and configuration compliance alerting with automatic remediation. Real-time health summary for fabric, devices, and topology. Correlated visibility for fabric (underlay, overlay, virtual and physical endpoints), including compute visualization with VMware.
  - Network traffic monitoring with Cisco Nexus Data Broker builds simple, scalable, and cost-effective network Test Access Points (TAPs) and Cisco Switched Port Analyzer (SPAN) aggregation for network traffic monitoring and analysis.
- **Cisco Tetration Analytics platform support**
  - The telemetry information from the Nexus 9300 Series switches is exported every 100 milliseconds by default directly from the switch's Application-Specific Integrated Circuit (ASIC). This information consists of three types of data: (a) Flow information, this information contains information about endpoints, protocols, ports, when the flow started, how long the flow was active, etc. (b) Inter-packet variation, this information captures any inter-packet variations within the flow. Examples include variation in Time To Live (TTL), IP and TCP flags, payload length, etc. (c) 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 a deep application insights 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.

- **Cisco Network Assurance Engine (NAE)**
  - Cisco NAE continuously verifies if the network infrastructure is operating as per policy intent and it leverages the power of mathematical models to reason on behalf of the operator in policy, configuration and dynamic state level. NAE can precisely indicate problems in the network, identify which application or part of network is impacted, root-cause the problem and suggest how to fix it. Its continuous verification approach transforms Day 2 Operations from reactive to proactive mode and it does so without using any packet data. NAE helps avoid outages by predicting the impact of changes, reducing network related IT incidents and shrinking the mean time to repair by up to 66%. NAE also helps assure network security and segmentation compliance. To learn more about NAE, visit https://www.cisco.com/c/en/us/products/data-center-analytics/network-assurance-engine/index.html.

Product specifications

The Cisco Nexus 9300-EX series offer industry-leading density and performance with flexible port configurations that can support existing copper and fiber cabling (Tables 2).

Table 2. Cisco Nexus 9300-EX Series Switch specifications

Feature	Cisco Nexus 93180YC-EX	Cisco Nexus 93108TC-EX	Cisco Nexus 93180LC-EX
Ports	48 x 1/10/25-Gbps and 6 x 40/100-Gbps QSFP28 ports	48 x 100-Mbps/1/10GBASE-T and 6 x 40/100-Gbps QSFP28 ports	Up to 32 x 40/50-Gbps QSFP+ ports OR 18 x 100-Gbps QSFP28 ports
CPU	4 cores	4 cores	4 cores
System memory	24 GB	24 GB	24 GB
SSD drive	64 GB	64 GB	64 GB
System buffer	40 MB	40 MB	40 MB
Management ports	2 ports: 1 RJ-45 and 1 SFP	2 ports: 1 RJ-45 and 1 SFP	2 ports: 1 RJ-45 and 1 SFP
USB ports	1	1	1
RS-232 serial ports	1	1	1
Power supplies (up to 2)	500W AC, 650W AC, 930W DC, or 1200W HVAC/HVDC	500W AC, 650W AC, 930W DC, or 1200W HVAC/HVDC	500W AC, 930W DC, or 1200W HVAC/HVDC
Typical power* (AC/DC)	210W	290W	220W
Maximum power* (AC/DC)	470W	499W	500W
BTU/hr	1604	1703	1706
Input voltage (AC)	100 to 240V	100 to 240V	100 to 240V
Input voltage (high-voltage AC [HVAC])	200 to 277V	200 to 277V	200 to 277V

Feature	Cisco Nexus 93180YC-EX	Cisco Nexus 93108TC-EX	Cisco Nexus 93180LC-EX
Input voltage (DC)	-48 to -60V	-48 to -60V	-48 to -60V
Input voltage (high-voltage DC [HVDC])	-240 to -380V	-240 to -380V	-240 to -380V
Frequency (AC)	50 to 60 Hz	50 to 60 Hz	50 to 60 Hz
Fans	4	4	4
Airflow	Port-side intake and exhaust	Port-side intake and exhaust	Port-side intake and exhaust
Physical dimensions (H x W x D)	1.72 x 17.3 x 22.5 in. (4.4 x 43.9 x 57.1 cm)	1.72 x 17.3 x 22.5 in. (4.4 x 43.9 x 57.1 cm)	1.72 x 17.3 x 22.5 in. (4.4 x 43.9 x 57.1 cm)
Acoustics	48.5 dBA at 40% fan speed, 64.9 dBA at 70% fan speed, and 77.8 dBA at 100% fan speed	48.6 dBA at 40% fan speed, 65.2 dBA at 70% fan speed, and 76.5 dBA at 100% fan speed	49.9 dBA at 50% fan speed, 66 dBA at 70% fan speed, and 73.9 dBA at 100% fan speed
RoHS compliance	Yes	Yes	Yes
MTBF	390,330 hours	366,130 hours	323,440 hours
Minimum ACI image	ACI-N9KDK9-11.3	ACI-N9KDK9-12.0	ACI-N9KDK9-12.2(1n)
Minimum NX-OS image	NXOS-703I4.2	NXOS-703I4.3	NXOS-703I6.1

* Typical and maximum power values are based on input drawn from the power circuit. The power supply value (for example, 500W AC power supply: NXA-PAC-500W-PI) is based on the output rating to the inside of the switch.

Table 3 lists the performance and scalability specifications for the Cisco Nexus 9300-EX series switches. (Check the software release notes for feature support information.)

Table 3. Hardware performance and scalability specifications*

Item	Cisco Nexus 9300-EX Series Switches
Maximum number of Longest Prefix Match (LPM) routes**	896,000
Maximum number of IP host entries**	896,000
Maximum number of MAC address entries**	256,000
Maximum number of multicast routes	32,000
Number of Interior Gateway Management Protocol (IGMP) snooping groups	Shipping: 8,000 Maximum: 32,000
Maximum number of Cisco Nexus 2000 Series Fabric Extenders per switch	16

Item	Cisco Nexus 9300-EX Series Switches
Maximum number of Access Control List (ACL) entries	Per slice of the forwarding engine: 4000 ingress 2000 egress Total (2 forwarding slices): 8000 ingress 4000 egress
Maximum number of VLANs	4096**
Number of Virtual Routing and Forwarding (VRF) instances	Shipping: 1,000 Maximum: 16,000
Maximum number of ECMP paths	64
Maximum number of port channels	512
Maximum number of links in a port channel	32
Number of active SPAN sessions	4
Maximum number of VLAN's in Rapid per-VLAN Spanning Tree (RPVST) instances	3,967
Maximum number of Hot-Standby Router Protocol (HSRP) groups	490
Number of Network Address Translation (NAT) entries	1,023
Maximum number of Multiple Spanning Tree (MST) instances	64
Flow-table size used for Cisco Tetration Analytics platform* **	64,000
Number of Queues	8

* More templates and greater scalability are on the roadmap. Refer to the latest Cisco Nexus 9000 Series Verified Scalability Guide documentation for the latest exact scalability values validated for specific software.

** 127 VLANs out of 4096 are reserved

*** Raw capacity of flow table.

Table 4 lists the environmental properties, and Table 5 lists the weight for the Cisco Nexus 9300-EX series 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)

Property	Description
Humidity	5 to 95% (noncondensing)
Altitude	0 to 13,123 ft (0 to 4000m)

Table 5. Weight

Component	Weight
Cisco Nexus 93180YC-EX without power supplies or fans	17.2 lb (7.8 kg)
Cisco Nexus 93108TC-EX without power supplies or fans	17.7 lb (8.0 kg)
Cisco Nexus 93180LC-EX without power supplies or fans	17.2 lb (7.8 kg)
500W AC power supply	2.42 lb (1.1 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)
Fan tray: NXA-FAN-30CFM-F or NXA-FAN-30CFM-B	0.26 lb (0.12 kg)

Table 6 summarizes regulatory standards compliance for the Cisco Nexus 9300-EX series 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 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	• 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

Specification	Description
EMC: Immunity	• 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

Software Licensing and Optics Supported

The software packaging for the Cisco Nexus 9000 Series offers flexibility and a comprehensive feature set. 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. To meet customer requirements, licensing is available as both subscription and perpetual. The licensing guide illustrates the software packaging and licensing available to enable advanced features. For the latest software release information and recommendations, refer to the product bulletin at https://www.cisco.com/go/nexus9000.

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 9300-EX series switches.

Table 7. Ordering information

Part Number	Product Description
Base Part Numbers	
N9K-C93180YC-EX	Nexus 9K Fixed with 48p 1/10G/25G SFP and 6p 40G/100G QSFP28
N9K-C93108TC-EX	Nexus 9K Fixed with 48p 10G BASE-T and 6p 40G/100G QSFP28
N9K-C93180LC-EX	Nexus 9K Fixed with up to 32p 40/50G QSFP+ or up to 18p 100G QSFP28
Power Supplies on Nexus 9300-EX	
NXA-PAC-500W-PI	Nexus 9000 500W AC PS, Port-side Intake; Supported on Nexus 93180YC-EX and 93108tC-EX only
NXA-PAC-500W-PE	Nexus 9000 500W AC PS, Port-side Exhaust; Supported on Nexus 93180YC-EX and 93108tC-EX only
NXA-PAC-500W-PE	Nexus 9000 500W AC PS, Port-side Exhaust
NXA-PAC-500W-PE	Nexus 9000 500W AC PS, Port-side Exhaust
NXA-PDC-930W-PI	Nexus 9000 930W DC PS, Port-side Intake

Part Number	Product Description
NXA-PDC-930W-PE	Nexus 9000 930W DC PS, Port-side Exhaust
N9K-PUV-1200W	Nexus 9300 1200W Universal Power Supply, Bi-directional air flow and Supports HVAC/HVDC
Fans on Nexus 9300-EX Series	
NXA-FAN-30CFM-F	Nexus Single Fan, 30CFM, port side exhaust airflow
NXA-FAN-30CFM-B	Nexus Single Fan, 30CFM, port side intake airflow
Licenses on Nexus 9300-EX Series	
C1E1TN9300XF-3Y	ACI & NX-OS Subscription Essential package for 10/25/40G+ Nexus 9K Leaf, 3 Year Term
C1E1TN9300XF-5Y	ACI & NX-OS Subscription Essential package for 10/25/40G+ Nexus 9K Leaf, 5 Year Term
C1A1TN9300XF-3Y	ACI & NX-OS Subscription Advantage package for 10/25/40G+ Nexus 9K Leaf, 3 Year Term
C1A1TN9300XF-5Y	ACI & NX-OS Subscription Advantage package for 10/25/40G+ Nexus 9K Leaf, 5 Year Term
ACI-ES-XF	ACI Essential SW license for a 10/25/40G+ Nexus 9K Leaf
ACI-AD-XF	ACI Advantage SW license for a 10/25/40G+ Nexus 9K Leaf
NXOS-ES-XF	NX-OS Essential SW license for a 10/25/40G+ Nexus 9K Leaf
NXOS-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)
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)

Part Number	Product Description
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 on Nexus 9300-EX Series	
NXK-ACC-KIT-1RU	Nexus Fixed Accessory Kit with 4-post rack mount kit

Warranty, Service and support

The Cisco Nexus 9300-EX series 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 offers a range of professional, solution, and product support services for each stage of your Cisco Nexus 9300-EX series 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 ACI, Cisco SMARTnet™ Service, and Cisco Smart Net Total Care™* service.

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

* For Cisco products only.

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 2018 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

Reference links to **product-specific environmental sustainability information** that is mentioned in relevant sections of this data sheet are provided in the following table:

Sustainability Topic	Reference
General	
Product Compliance	Table 6. Safety and Compliance Information
Power	
Power Supply	Table 2. Product specifications: Power Supplies, Typical and Max power specification
Material	
Unit Weight	Table 5. Weight
Dimensions and Mean Time between Failures Metrics	Table 2. Product specifications

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For more information

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

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Printed in USA C78-742283-05 08/20