



The bridge to possible

Data Sheet

# Cisco Nexus 3408-S Switch

---

# Contents

Cisco Nexus 3400-S overview	3
Cisco NX-OS software overview	4
Transceiver and cabling options	6
Product specifications	6
Regulatory standards compliance	12
Ordering information	12
Warranty	13
Service and support	13
Cisco Capital	14
For more information	14

## Cisco Nexus 3400-S overview

The Cisco Nexus® 3400-S is the first 400G capable switch in the Nexus 3000 portfolio with 50 Gbps PAM4 Serial-Deserializers (SerDes), designed for data centers with industry-leading performance-per-watt power efficiency at low latency, offering leading analytics.

Main benefits of the Cisco Nexus 3400-S switches:

- With the 12.8-Tbps ASIC, the Cisco Nexus 3408-S series provides 128 ports of 100G or 32 ports of 400G, allowing customers to grow at scale with fewer numbers of switches in their fabric, simplifying management and reducing cost and number of hops.
- At 400G, the Cisco Nexus 3400-S offers the lowest latency in the industry at high power efficiency.
- The Cisco Nexus 3400-S offers a programmable pipeline translated to flexible profiles, whether Longest-Prefix-Matching (LPM)-optimized or layer 3 host-optimized. Customers can choose the profile to match their deployment needs.
- Cisco Nexus 3400-S switches enable deep network analytics, offering per flow monitoring, queue forensics, and drop-packet forensics to help monitor customer networks.

The Cisco Nexus 3408-S (Figure 1) is a 4-Rack-Unit (RU), 8-slot chassis with the flexibility of 100G or 400G Line-Card Expansion Modules (LEMs) offering 128 ports of 100G or 32 ports of 400G. The Cisco Nexus 3408-S is the industry's highest port radix in a compact and energy-efficient form factor. The Cisco Nexus 3408-S supports HVAC/DC power inputs with forward airflow direction.



**Figure 1.**  
Cisco Nexus 3408-S

The Cisco Nexus 3408-S has the following hardware configuration:

- 4RU, 8-slot chassis
- NXM-X16C LEM with 16 ports of Quad-Small-Form-Factor 28 (QSFP28)
- NXM-X4D LEM with 4 ports of Quad Small Form-Factor Pluggable - Double Density (QSFP-DD)
- Beacon LED
- Status LED
- Dual-redundant power supplies
- Redundant (2+1) fans
- One RS-232 console port
- One RJ45 and one SFP Management port
- One USB port



**Figure 2.**  
Cisco Nexus NXM-X16C, 16 Ports of 100G

The 100G LEMs are 16 ports of QSFP28 supporting 100G native speed and 50, 40, 25, 10G breakout speeds.

The 400G LEMs are 4 ports of QSFP-DD that are backward-compatible with QSFP+, QSFP28, and QSFP56. Each QSFP-DD port can operate at 400, 200, 100, 40 native speeds and 200, 100, 50, 25, 10 Gbps breakout.

## Cisco NX-OS software overview

Cisco NX-OS is a data center-class operating system built with modularity, resiliency, and serviceability at its foundation. Cisco NX-OS helps ensure continuous availability and sets the standard for mission-critical data center environments. The self-healing and highly modular design of Cisco NX-OS makes zero-impact operations a reality and provides exceptional operational flexibility.

Focused on the requirements of the data center, Cisco NX-OS provides a robust and comprehensive feature set that meets the networking requirements of present and future data centers. With an XML interface and a Command-Line Interface (CLI) like that of Cisco IOS® Software, Cisco NX-OS provides state-of-the-art implementations of relevant networking standards as well as a variety of true data-center-class Cisco innovations.

The Cisco Nexus 3400-S provides:

**Wire-rate layer 2 and 3 switching on all ports**, with up to 25.6 Terabits per second (Tbps) with 7.2 Bpps at ingress and 10 Bpps at egress.

**Robust programmability**, with support for Cisco NX-API, Linux containers, XML, and JavaScript Object Notation (JSON) APIs, Python.

**High performance and scalability**, with a four-core CPU, 32 GB of DRAM, and 70 MB of dynamic buffer allocation, making the switch excellent for massively scalable data centers and big data applications.

---

## Flexibility

- The Cisco Nexus 3408-S supports break out for 2x200/50G, 4x100/50G/25G/10G, and 8x50G, supporting up to 128 ports of 100G or up to 168 ports of 50G.
  - The NXM-X16C supports break out<sup>1</sup> for 2x50G and 4x25G/10G.
  - The NXM-X4D supports break out<sup>1</sup> for 2x200/50G or 4x100/50/25G/10G.
- Both fiber and copper cabling solutions are available for 10-, 25-, 40-, 50-, 100 and 400-Gbps connectivity, including an Active Optical Cable (AOC) and Direct-Attached Cable (DAC).

## High availability

- Virtual Port Channel (vPC) technology provides layer 2 multipath through the elimination of Spanning Tree Protocol (STP). 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 512-way<sup>2</sup> Equal-Cost Multipath (ECMP) routing enables the use of layer 3 fat-tree designs. This feature allows organizations to prevent network bottlenecks, increase resiliency, and add capacity with little network disruption.
- Advanced reboot<sup>2</sup> capabilities include hot and cold patching.
- The switch uses hot-swappable Power-Supply Units (PSUs) and fans.

## Purpose-built Cisco NX-OS operating system with comprehensive, proven innovations

- Power-On Auto Provisioning (POAP) enables touchless bootup and configuration of the switch, drastically reducing provisioning time.
- Cisco Embedded Event Manager (EEM) and Python scripting enable 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.
- Ethalyzer is a built-in packet analyzer for monitoring and troubleshooting control-plane traffic and is based on the popular Wireshark open-source network protocol analyzer.
- Complete layer 3 routing protocol suites are supported, including Border Gateway Protocol (BGP), Open Shortest Path First (OSPF), Enhanced Interior Gateway Routing Protocol (EIGRP), Routing Information Protocol Version 2 (RIPv2) and Intermediate System to Intermediate System (IS-IS).

---

<sup>1</sup> Refer to the break-out matrix in software configuration guide for details

<sup>2</sup> Refer to verified scalability guide for latest software support

**Table 1.** Software licensing for Cisco Nexus 3408-S Switches

Software package	Features supported
<b>System default (no license required)</b>	<ul style="list-style-type: none"> <li>Comprehensive layer 2 feature set: VLAN, IEEE 802.1Q trunking, Link Aggregation Control Protocol (LACP), Unidirectional Link Detection (UDLD; Standard and Aggressive), Multiple Spanning Tree Protocol (MSTP), Rapid Spanning Tree Protocol (RSTP), and Spanning Tree Protocol (STP) guard</li> <li>Security: Authentication, Authorization, and Accounting (AAA), Access Control Lists (ACLs), storm control, and configurable Control-Plane Policing (CoPP)</li> <li>Management features: Cisco Data Center Network Manager (DCNM) support, Secure Shell Version 2 (SSHv2) access, Cisco Discovery Protocol, Simple Network Management Protocol (SNMP), syslog</li> <li>Monitoring features: Advanced buffer monitoring, SPAN, and ERSPAN</li> </ul>
<b>Base license</b>	<ul style="list-style-type: none"> <li>Layer 3 IP routing: Inter-VLAN Routing (IVR), static routes, Routing Information Protocol Version 2 (RIPv2), ACLs, Open Shortest Path First Version 2 (OSPFv2; limited to 256 routes), Enhanced Interior Gateway Routing Protocol (EIGRP) stub, Hot Standby Router Protocol (HSRP), and Virtual Router Redundancy Protocol (VRRP)</li> </ul>
<b>Essential License (N3K-ES-XM)</b>	<ul style="list-style-type: none"> <li>Advanced layer 3 IP routing: OSPFv2, EIGRP, Border Gateway Protocol (BGP), Intermediate System to Intermediate System (IS-IS), and Virtual Routing and Forwarding Lite (VRF-Lite), DCNM and Telemetry Features: Buffer Drop Capture (BDC), High Delay Capture (HDC) and INT</li> </ul>
<b>Cisco Nexus Data Broker license (NDB-FX-SWT-K9)</b>	<ul style="list-style-type: none"> <li>License for using the tap and SPAN aggregation functions with Cisco Nexus Data Broker; supported on the Essential License</li> </ul>

## Transceiver and cabling options

The Cisco Nexus 3400-S are Quad Small Form factor pluggable - Double Density (QSFP-DD) platforms that support the full range of optical transceivers, starting from Active Optical Cables (AOC), Direct Attach Cables (DAC).

[Learn more details](#) about the optical modules available and the minimum software release required for each supported optical module via the [Transceiver Module Group \(TMG\) Compatibility Matrix](#).

## Product specifications

The following table lists the product specification for Cisco Nexus 3408-S.

**Table 2.** Product specifications

Specification	Cisco Nexus 3408-S
<b>Physical</b>	<ul style="list-style-type: none"> <li>4 RU, 8-slot chassis</li> <li>Beacon LED</li> <li>Status LED</li> <li>Dual-redundant power supplies</li> <li>Redundant (2+1) fans</li> <li>Two 100/1000Mbps SFP ports</li> <li>One RS-232 serial console port</li> <li>One RJ45 and one SFP management port</li> <li>One USB port</li> </ul>
<b>Performance</b>	25.6-Tbps switching capacity

**Table 3.** Hardware specifications common to all Nexus 3804-S Switches

	Mode	Normal mode
<b>Hardware tables and scalability</b>	Number of MAC addresses	120K
	Number of IPv4/IPv6 unicast routes	440K / 360K
	Number of IPv4/IPv6 hosts	192K / 96K
	Number of IPv4 multicast routes	Up to 96K with 8K groups
	Number of VLANS	4K
	Number of ACL entries	3.5K ingress and 1.5K egress
	Number of spanning-tree instances	Rapid Spanning Tree Protocol (RSTP): 123 Multiple Spanning Tree (MST) Protocol: 64
	Number of EtherChannels	512
	Number of ports per EtherChannel	up to 128
	Buffer size	70 Mb
	Boot flash memory	128 GB
<b>Power</b>	Number of power supplies	2 (redundant)
	Power supply types	AC (forward airflow)
	Input voltage	100 to 240 VAC
	Frequency	50 to 60 Hz
	Power supply efficiency	89 to 91% at 220V
<b>Cooling</b>	Forward airflow: Port-side intake (air enters through ports and exits through fan tray and power supplies) Six individual, hot-swappable fans (5+1 redundant)	
<b>Environment</b>	Dimensions (height x width x depth)	6.97 in. x 17.3 in. x 31.6 in.
	Weight	N3K-C3408-S weight across configurations: <ul style="list-style-type: none"> <li>• 68 lb (without LEMs, PSUs, or fans)</li> <li>• 107.7 lb (with eight 100G LEMs, PSUs, and fans)</li> <li>• 104.5 lb (with eight 400G LEMs, PSUs, and fans)</li> </ul> Individual LEMs: <ul style="list-style-type: none"> <li>• NXM-X16C (100G LEM) - 3.6 lb</li> <li>• NXM-X4D (400G LEM) - 3.2 lb</li> </ul>
	Operating temperature	32 to 104° F (0 to 40° C)
	Storage temperature	-40 to 158° F (-40 to 70° C)
	Relative humidity	5 to 95% non-condensing
	Altitude (Operating)	Up to 13,123 ft.
	Altitude (Non-Operating)	Up to 16,000 ft.

**Table 4.** Software features common to all Nexus 3000 Switches

Description	Specifications
<b>Layer 2</b>	<ul style="list-style-type: none"> <li>• Layer 2 switch ports and VLAN trunks</li> <li>• IEEE 802.1Q VLAN encapsulation</li> <li>• Support for up to 4096 VLANs</li> <li>• Rapid Per-VLAN Spanning Tree Plus (PVRST+) (IEEE 802.1w compatible)</li> <li>• MSTP (IEEE 802.1s): 64 instances</li> <li>• Spanning Tree PortFast</li> <li>• Spanning Tree Root Guard</li> <li>• Spanning Tree Bridge Assurance</li> <li>• Cisco EtherChannel technology (up to 24 ports per EtherChannel)</li> <li>• LACP: IEEE 802.3ad, IEEE 802.1ax</li> <li>• Advanced PortChannel hashing based on layer 2, 3, and 4 information</li> <li>• Jumbo frames on all ports (up to 9216 bytes)</li> <li>• Link-level flow control (IEEE 802.3x)</li> <li>• vPC</li> </ul>
<b>Layer 3</b>	<ul style="list-style-type: none"> <li>• Layer 3 interfaces: Routed ports on interfaces, Switch Virtual Interfaces (SVIs), PortChannels, and subinterfaces (total: 1024)</li> <li>• 64-way equal-cost multipath (ECMP)</li> <li>• 4096 ACL entries</li> <li>• Routing protocols: Static, RIPv2, EIGRP, OSPF, and BGP</li> <li>• HSRP and VRRP</li> <li>• ACL: Routed ACL with layer 3 and 4 options to match ingress and egress ACLs</li> <li>• VRF: VRF-Lite (IP VPN), VRF-aware unicast (BGP, OSPF, and RIP), and VRF-aware multicast</li> <li>• VRF route leaking</li> <li>• Jumbo frame support (up to 9216 bytes)</li> </ul>
<b>Security</b>	<ul style="list-style-type: none"> <li>• Ingress ACLs (standard and extended) on Ethernet</li> <li>• Standard and extended layer 3 to 4 ACLs include IPv4, Internet Control Message Protocol (ICMP), Transmission Control Protocol (TCP), and User Datagram Protocol (UDP)</li> <li>• VLAN-based ACLs (VACLs)</li> <li>• Port-based ACLs (PACLs)</li> <li>• ACLs on virtual terminals (VTYs)</li> <li>• Dynamic Host Configuration Protocol (DHCP) relay</li> <li>• Control Plane Policing (CoPP)</li> </ul>
<b>Cisco Nexus Data Broker</b>	<ul style="list-style-type: none"> <li>• Topology support for tap and SPAN aggregation</li> <li>• Traffic load balancing to multiple monitoring tools</li> <li>• Packet truncation</li> <li>• Traffic filtering based on layer 1 through layer 4 header information</li> <li>• Traffic replication and forwarding to multiple monitoring tools</li> <li>• Robust Role-Based Access Control (RBAC)</li> <li>• Northbound Representational State Transfer (REST) API for all programmability support</li> </ul>

Description	Specifications
<b>Management</b>	<ul style="list-style-type: none"> <li>• Power On Auto Provisioning (POAP)</li> <li>• Python scripting</li> <li>• Switch management using 10/100/1000-Mbps management or console ports</li> <li>• CLI-based console to provide detailed out-of-band management</li> <li>• In-band switch management</li> <li>• Locator and beacon LEDs</li> <li>• Configuration rollback</li> <li>• SSHv2</li> <li>• Telnet</li> <li>• AAA</li> <li>• AAA with RBAC</li> <li>• RADIUS</li> <li>• TACACS+</li> <li>• Syslog</li> <li>• Embedded packet analyzer</li> <li>• SNMP v1, v2, and v3</li> <li>• Enhanced SNMP MIB support</li> <li>• XML (NETCONF) support</li> <li>• Remote monitoring (RMON)</li> <li>• Advanced Encryption Standard (AES) for management traffic</li> <li>• Unified username and passwords across CLI and SNMP</li> <li>• Microsoft Challenge Handshake Authentication Protocol (MS-CHAP)</li> <li>• Digital certificates for management between switch and RADIUS server</li> <li>• Cisco Discovery Protocol Versions 1 and 2</li> <li>• RBAC</li> <li>• SPAN on physical, PortChannel, and VLAN</li> <li>• ERSPAN Versions 2 and 3</li> <li>• Ingress and egress packet counters per interface</li> <li>• Network Time Protocol (NTP)</li> <li>• Cisco Online Health Management System (OHMS)</li> <li>• Comprehensive bootup diagnostic tests</li> <li>• Cisco DCNM</li> <li>• Active buffer monitoring</li> </ul>

**Table 5.** Management and standards support

Description	Specification		
<b>MIB support</b>	<table border="0"> <tr> <td>           Generic MIBs           <ul style="list-style-type: none"> <li>• SNMPv2-SMI</li> <li>• CISCO-SMI</li> <li>• SNMPv2-TM</li> <li>• SNMPv2-TC</li> <li>• IANA-ADDRESS-FAMILY-NUMBERS-MIB</li> <li>• IANAifType-MIB</li> <li>• IANAiprouteprotocol-MIB</li> </ul> </td> <td>           Monitoring MIBs           <ul style="list-style-type: none"> <li>• NOTIFICATION-LOG-MIB</li> <li>• CISCO-SYSLOG-EXT-MIB</li> <li>• CISCO-PROCESS-MIB</li> <li>• RMON-MIB</li> <li>• CISCO-RMON-CONFIG-MIB</li> <li>• CISCO-HC-ALARM-MIB</li> </ul> </td> </tr> </table>	Generic MIBs <ul style="list-style-type: none"> <li>• SNMPv2-SMI</li> <li>• CISCO-SMI</li> <li>• SNMPv2-TM</li> <li>• SNMPv2-TC</li> <li>• IANA-ADDRESS-FAMILY-NUMBERS-MIB</li> <li>• IANAifType-MIB</li> <li>• IANAiprouteprotocol-MIB</li> </ul>	Monitoring MIBs <ul style="list-style-type: none"> <li>• NOTIFICATION-LOG-MIB</li> <li>• CISCO-SYSLOG-EXT-MIB</li> <li>• CISCO-PROCESS-MIB</li> <li>• RMON-MIB</li> <li>• CISCO-RMON-CONFIG-MIB</li> <li>• CISCO-HC-ALARM-MIB</li> </ul>
Generic MIBs <ul style="list-style-type: none"> <li>• SNMPv2-SMI</li> <li>• CISCO-SMI</li> <li>• SNMPv2-TM</li> <li>• SNMPv2-TC</li> <li>• IANA-ADDRESS-FAMILY-NUMBERS-MIB</li> <li>• IANAifType-MIB</li> <li>• IANAiprouteprotocol-MIB</li> </ul>	Monitoring MIBs <ul style="list-style-type: none"> <li>• NOTIFICATION-LOG-MIB</li> <li>• CISCO-SYSLOG-EXT-MIB</li> <li>• CISCO-PROCESS-MIB</li> <li>• RMON-MIB</li> <li>• CISCO-RMON-CONFIG-MIB</li> <li>• CISCO-HC-ALARM-MIB</li> </ul>		

Description	Specification
	<ul style="list-style-type: none"> <li>• HCNUM-TC</li> <li>• CISCO-TC</li> <li>• SNMPv2-MIB</li> <li>• SNMP-COMMUNITY-MIB</li> <li>• SNMP-FRAMEWORK-MIB</li> <li>• SNMP-NOTIFICATION-MIB</li> <li>• SNMP-TARGET-MIB</li> <li>• SNMP-USER-BASED-SM-MIB</li> <li>• SNMP-VIEW-BASED-ACM-MIB</li> <li>• CISCO-SNMP-VACM-EXT-MIB</li> </ul> <p>Ethernet MIBs</p> <ul style="list-style-type: none"> <li>• CISCO-VLAN-MEMBERSHIP-MIB</li> </ul> <p>Configuration MIBs</p> <ul style="list-style-type: none"> <li>• ENTITY-MIB</li> <li>• IF-MIB</li> <li>• CISCO-ENTITY-EXT-MIB</li> <li>• CISCO-ENTITY-FRU-CONTROL-MIB</li> <li>• CISCO-ENTITY-SENSOR-MIB</li> <li>• CISCO-SYSTEM-MIB</li> <li>• CISCO-SYSTEM-EXT-MIB</li> <li>• CISCO-IP-IF-MIB</li> <li>• CISCO-IF-EXTENSION-MIB</li> <li>• CISCO-NTP-MIB</li> <li>• CISCO-IMAGE-MIB</li> <li>• CISCO-IMAGE-UPGRADE-MIB</li> </ul> <p>Security MIBs</p> <ul style="list-style-type: none"> <li>• CISCO-AAA-SERVER-MIB</li> <li>• CISCO-AAA-SERVER-EXT-MIB</li> <li>• CISCO-COMMON-ROLES-MIB</li> <li>• CISCO-COMMON-MGMT-MIB</li> <li>• CISCO-SECURE-SHELL-MIB</li> </ul> <p>Miscellaneous MIBs</p> <ul style="list-style-type: none"> <li>• CISCO-LICENSE-MGR-MIB</li> <li>• CISCO-FEATURE-CONTROL-MIB</li> <li>• CISCO-CDP-MIB</li> <li>• CISCO-RF-MIB</li> </ul> <p>Layer 3 and Routing MIBs</p> <ul style="list-style-type: none"> <li>• UDP-MIB</li> <li>• TCP-MIB</li> <li>• OSPF-MIB</li> <li>• OSPF-TRAP-MIB</li> <li>• BGP4-MIB</li> <li>• CISCO-HSRP-MIB</li> </ul>
<p><b>Standards</b></p>	<ul style="list-style-type: none"> <li>• IEEE 802.1D: Spanning Tree Protocol</li> <li>• IEEE 802.1p: CoS Prioritization</li> <li>• IEEE 802.1Q: VLAN Tagging</li> <li>• IEEE 802.1s: Multiple VLAN Instances of Spanning Tree Protocol</li> <li>• IEEE 802.1w: Rapid Reconfiguration of Spanning Tree Protocol</li> <li>• IEEE 802.3z: Gigabit Ethernet</li> <li>• IEEE 802.3ad: Link Aggregation Control Protocol (LACP)</li> <li>• IEEE 802.1ax: Link Aggregation Control Protocol (LACP)</li> <li>• IEEE 802.3ae: 10 Gigabit Ethernet</li> <li>• IEEE 802.3ba: 40 Gigabit Ethernet</li> <li>• IEEE 802.1ab: LLDP</li> </ul>

Description	Specification
RFC	<p data-bbox="358 268 407 296">BGP</p> <ul data-bbox="358 310 1128 842" style="list-style-type: none"> <li data-bbox="358 310 769 338">• RFC 1997: BGP Communities Attribute</li> <li data-bbox="358 348 1128 375">• RFC 2385: Protection of BGP Sessions with the TCP MD5 Signature Option</li> <li data-bbox="358 386 748 413">• RFC 2439: BGP Route Flap Damping</li> <li data-bbox="358 424 992 451">• RFC 2519: A Framework for Inter-Domain Route Aggregation</li> <li data-bbox="358 462 883 489">• RFC 2545: Use of BGPv4 Multiprotocol Extensions</li> <li data-bbox="358 499 846 527">• RFC 2858: Multiprotocol Extensions for BGPv4</li> <li data-bbox="358 537 943 564">• RFC 3065: Autonomous System Confederations for BGP</li> <li data-bbox="358 575 883 602">• RFC 3392: Capabilities Advertisement with BGPv4</li> <li data-bbox="358 613 565 640">• RFC 4271: BGPv4</li> <li data-bbox="358 651 1040 678">• RFC 4273: BGPv4 MIB: Definitions of Managed Objects for BGPv4</li> <li data-bbox="358 688 711 716">• RFC 4456: BGP Route Reflection</li> <li data-bbox="358 726 964 753">• RFC 4486: Subcodes for BGP Cease Notification Message</li> <li data-bbox="358 764 857 791">• RFC 4724: Graceful Restart Mechanism for BGP</li> <li data-bbox="358 802 964 829">• RFC 4893: BGP Support for Four-Octet AS Number Space</li> </ul> <p data-bbox="358 856 423 884">OSPF</p> <ul data-bbox="358 898 1068 1115" style="list-style-type: none"> <li data-bbox="358 898 656 926">• RFC 2328: OSPF Version 2</li> <li data-bbox="358 936 976 963">• RFC 3101: OSPF Not-So-Stubby-Area (NSSA) Option</li> <li data-bbox="358 974 829 1001">• RFC 3137: OSPF Stub Router Advertisement</li> <li data-bbox="358 1012 1068 1039">• RFC 3509: Alternative Implementations of OSPF Area Border Routers</li> <li data-bbox="358 1050 721 1077">• RFC 3623: Graceful OSPF Restart</li> <li data-bbox="358 1087 699 1115">• RFC 4750: OSPF Version 2 MIB</li> </ul> <p data-bbox="358 1136 396 1163">RIP</p> <ul data-bbox="358 1178 889 1927" style="list-style-type: none"> <li data-bbox="358 1178 699 1205">• RFC 1724: RIPv2 MIB Extension</li> <li data-bbox="358 1215 756 1243">• RFC 2082: RIPv2 MD5 Authentication</li> <li data-bbox="358 1253 634 1281">• RFC 2453: RIP Version 2</li> <li data-bbox="358 1291 500 1318">• IP Services</li> <li data-bbox="358 1329 786 1356">• RFC 768: User Datagram Protocol (UDP)</li> <li data-bbox="358 1367 834 1394">• RFC 783: Trivial File Transfer Protocol (TFTP)</li> <li data-bbox="358 1404 505 1432">• RFC 791: IP</li> <li data-bbox="358 1442 899 1470">• RFC 792: Internet Control Message Protocol (ICMP)</li> <li data-bbox="358 1480 526 1507">• RFC 793: TCP</li> <li data-bbox="358 1518 829 1545">• RFC 826: Address Resolution Protocol (ARP)</li> <li data-bbox="358 1556 548 1583">• RFC 854: Telnet</li> <li data-bbox="358 1593 526 1621">• RFC 959: FTP</li> <li data-bbox="358 1631 602 1659">• RFC 1027: Proxy ARP</li> <li data-bbox="358 1669 889 1696">• RFC 1305: Network Time Protocol (NTP) Version 3</li> <li data-bbox="358 1707 867 1734">• RFC 1519: Classless Interdomain Routing (CIDR)</li> <li data-bbox="358 1745 618 1772">• RFC 1542: BootP Relay</li> <li data-bbox="358 1782 846 1810">• RFC 1591: Domain Name System (DNS) Client</li> <li data-bbox="358 1820 623 1848">• RFC 1812: IPv4 Routers</li> <li data-bbox="358 1858 634 1885">• RFC 2131: DHCP Helper</li> <li data-bbox="358 1896 553 1923">• RFC 2338: VRRP</li> </ul>

## Regulatory standards compliance

The following table summarizes regulatory standards compliance for the Cisco Nexus 3000 Series.

**Table 6.** Regulatory standards compliance: Safety and EMC

Specification	Description
<b>Regulatory compliance</b>	<ul style="list-style-type: none"><li>• Products should comply with CE Markings per directives 2004/108/EC and 2006/95/EC</li></ul>
<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>• KN24</li></ul>
<b>RoHS</b>	RoHS 5 compliant except for lead press-fit connectors

## Ordering information

The following table provides ordering information for Cisco Nexus 3408-S.

**Table 7.** Ordering information

Part number	Description
<b>Chassis</b>	
<b>NXM-X16C</b>	Nexus 100G Line Expansion Module
<b>NXM-X4D</b>	Nexus 400G Line Expansion Module
<b>NXM-XBLNK</b>	Nexus Blank Line Expansion Module
<b>NXA-FAN-300CFM-PI</b>	Nexus fan, forward airflow (port-side intake)

Part number	Description
<b>NXA-PHV-2KW-PI</b>	Nexus 2KW HV power supply, forward airflow (port-side intake)
<b>NXA-PDC-2KW-PI</b>	Nexus 2KW DC power supply, forward airflow (port-side intake)
<b>NXA-PAC-2KW-PI</b>	Nexus 2KW AC power supply, forward airflow (port-side intake)
<b>Software Licenses</b>	
<b>N3K-ES-XM</b>	Nexus 3408-S Essential License including Layer-3 LAN Enterprise, DCNM and Telemetry features
<b>Spares</b>	
<b>N3K-C3408-S=</b>	Nexus 3408-S switch with 32 ports of QSFP-DD spare
<b>NXM-X16C=</b>	Nexus 100G Line Expansion Module spare
<b>NXM-X4D=</b>	Nexus 400G Line Expansion Module spare
<b>NXM-XBLNK=</b>	Nexus Blank Line Expansion Module spare
<b>NXA-FAN-300CFM-PI=</b>	Nexus fan, forward airflow (port-side intake) spare
<b>NXA-PHV-2KW-PI=</b>	Nexus 2KW HV power supply, forward airflow (port-side intake) spare
<b>NXA-PDC-2KW-PI=</b>	Nexus 2KW DC power supply, forward airflow (port-side intake) spare
<b>NXA-PAC-2KW-PI=</b>	Nexus 2KW AC power supply, forward airflow (port-side intake) spare

## Warranty

The Cisco Nexus 3000 Series Switches have 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 3000 Series 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 operational 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® 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 3000 Series Switches. Spanning the entire network lifecycle, Cisco Services helps increase investment protection, optimize network operations, support migration operations, and strengthen your IT expertise.

---

## Cisco Capital

### Flexible payment solutions to help you achieve your objectives

Cisco Capital makes it easier to get the right technology to achieve your objectives, enable business transformation and help you stay competitive. We can help you reduce the total cost of ownership, conserve capital, and accelerate growth. In more than 100 countries, our flexible payment solutions can help you acquire hardware, software, services and complementary third-party equipment in easy, predictable payments. [Learn more.](#)

### For more information

For more information, visit <https://www.cisco.com/go/nexus3000>. For information about Cisco Nexus Data Broker, visit <https://www.cisco.com/go/nexusdatabroker>.

<sup>[2]</sup> Wire rate on all ports for packets greater than 200 bytes

**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 <https://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: <https://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)