Data sheet Cisco public



# Cisco 6000 Series Switches

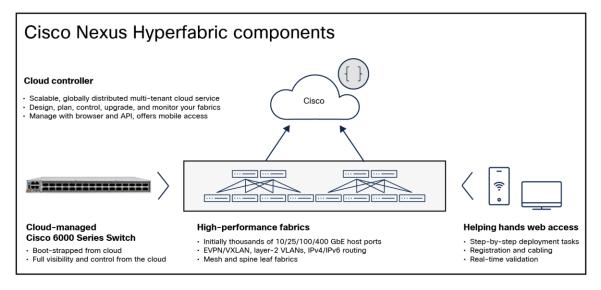
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### Product overview

Cisco 6000 Series Switches are cloud-managed network fabric switches. When paired with a <u>Cisco Nexus Hyperfabric</u> subscription, they provide a network fabric delivered as a service data center offer that enables customers to easily design, deploy, manage, and scale multiple fabrics globally with a minimum of expertise. It reinvents and simplifies every step of IT operations, ensuring repeatable and predictable outcomes.

<u>Cisco Nexus Hyperfabric</u> is a cloud-managed vertical stack solution consisting of purpose-built hardware, software, a cloud controller, day-2 operations, automation, and Cisco support that eliminates complexity. IT, application and DevOps teams manage the full lifecycle of designing, ordering, deploying, validate, monitoring, and scaling fabrics without requiring deep networking or operational expertise.



**Figure 1.**Cisco Nexus Hyperfabric vertical stack solution

When the Cisco 6000 switches arrive on-site and are deployed, they automatically connect to the cloud, to be claimed and provisioned by the cloud controller with a zero-touch plug-and-play approach. This process takes just minutes and results in a fully operational network fabric. When it comes time to change the capacity or shape of the design, customers can edit the design, approve the changes, and repeat the same process. The product provides guidance for all the physical changes needed to migrate the old topology to the new desired state, including cabling adjustments, and it reconfigures itself automatically.

#### Cisco HF6100 switch models

The Cisco Silicon One® Q200 Application-Specific Integrated Circuit (ASIC) is purpose-built for a next-generation network core-plus-edge switch such as the Cisco 6000 Series. It is the first enterprise ASIC to offer speeds up to 12.8 Tbps full duplex with 8 Bpps of forwarding performance, while supporting high-performance and full routing and switching capabilities without external memories.

The Cisco Silicon One Q200 ASIC:

- Is built on 7nm fabrication technology, capable of high performance while maintaining a low-power footprint
- · Has up to 12.8 (switching ASIC capacity) Tbps switching capacity with 8 Bpps forwarding rate
- Has 80 MB of dedicated low-latency buffer, with up to 8 GB of HBM buffer for deep packet buffers
- Provides up to 60 native nonblocking 10/25/50 Gigabit Ethernet SFP56 ports
- Provides up to 32 native nonblocking 40/100/200/400 Gigabit Ethernet QSFPDD ports
- Has an Intel® 2.3-GHz x86 CPU with 8 cores and 32-GB of DDR4 memory
- Provides flexible routing (IPv4, IPv6, and multicast) tables, Layer-2 tables, ACL tables, and QoS tables
- Has ASIC tables for switching scale up to 256K MAC addresses, and routing scale up to 2M routes
- Has dual-stack IPv4/IPv6 and dynamic hardware forwarding table allocations, for ease of IPv4-to-IPv6 migration
- Uses Cisco Nexus Hyperfabric technology, a network system virtualization technology that increases
  operational efficiency and boosts nonstop communications and scaled system bandwidth. Multichassis
  EtherChannel can be configured across Cisco Nexus Hyperfabric members for high resiliency.
- Has platinum-rated (90% efficient) AC and/or DC power supplies
- Has field-replaceable, N+1 redundant fan-tray units, with an added flexibility to choose the direction of airflow

### Platform benefits

Table 1. Hardware platform-supported capabilities

Model	HF6100-60L4D	HF6100-32D
Security		
Trustworthy solutions	Yes	Yes
Image signing	Yes	Yes
Secure boot	Yes	Yes
Cisco Trust Anchor module	Yes	Yes
MACsec encryption (256-bit AES-GCM)	No	No
Cisco WAN MACsec (256-bit AES-GCM)	No	No

Model	HF6100-60L4D	HF6100-32D
Access Control Lists (ACLs IPv4/IPv6)	Yes	Yes
Quality of service		
QoS - class of service support (L2)	Yes	Yes
QoS - type of service support (L3)	Yes	Yes
Strict priority queuing	Yes	Yes
Bandwidth policing	Yes¹	Yes <sup>1</sup>
Bandwidth shaping	Yes <sup>1</sup>	Yes <sup>1</sup>
IP routing		
Border Gateway Protocol Version 4 (BGPv4), and BGPv6	Yes	Yes
Unicast routing IPv4	Yes	Yes
Unicast routing IPv6	Yes	Yes
Multicast routing IPv4	Yes¹	Yes <sup>1</sup>
Multicast routing IPv6	Yes¹	Yes <sup>1</sup>
L3-routed subinterfaces	Yes	Yes
L3 VRF address family	Yes	Yes
BGP Ethernet VPN (EVPN) VXLAN		
Spine role	Yes	Yes
Leaf role	Yes	Yes
Mesh role	Yes	Yes
Border role	Yes	Yes
Standalone role	Yes	Yes
L2/L3 Virtual Network Interface (VNI)	Yes	Yes
Distributed anycast gateway (symmetric IRB)	Yes	Yes
ESI multihome support (backend)	Yes	Yes
Multichassis LACP (frontend)	Yes	Yes
L3 border handoff	Yes	Yes
L2 border handoff	Yes	Yes

Model	HF6100-60L4D	HF6100-32D
Virtual eXtensible LAN (VXLAN)	Yes	Yes
L2 Virtual Network Interface (VNI)	Yes	Yes
L3 Virtual Network Interface (VNI)	Yes	Yes
NetFlow		
NetFlow IPv4 flow records	Yes <sup>1</sup>	Yes <sup>1</sup>
NetFlow IPv6 flow records	Yes <sup>1</sup>	Yes <sup>1</sup>
NetFlow data export	Yes <sup>1</sup>	Yes <sup>1</sup>
NetFlow version 9 (NFv9) export	Yes <sup>1</sup>	Yes <sup>1</sup>
IPFIX export	Yes <sup>1</sup>	Yes <sup>1</sup>
Programmability through Nexus Hyperfabric Cloud Controller		
API	Yes	Yes
ZTP	Yes	Yes
Smart operations		
Out-of-band device mgmt	1x USB-C	1x USB-C

<sup>&</sup>lt;sup>1</sup> Feature is not available at FCS but is hardware capable.

### Platform details

### Switch models and configurations

All switches ship with 2x AC power supplies by default.

All switches ship with 6x front-to-back airflow fans by default.

All switches ship with 19" 4-post rackmount kits by default.

All switches ship with no power cord, by default.

All switches ship with no console cable, by default.

Figures 2 through 5 show the Cisco 6000 Series Switches.



**Figure 2.** HF6100-32D: Cisco 6000 Series switch with 32x400Gbps QSFP-DD - front



**Figure 3.** HF6100-32D: Cisco 6000 Series switch with 32x400Gbps QSFP-DD - back



Figure 4.

HF6100-60L4D: Cisco 6000 Series switch with 60x 50G SFP-28+ 32x400G QSFP-DD - front



Figure 5.

HF6100-60L4D: Cisco 6000 Series switch with 60x 50G SFP-28+ 32x400G QSFP-DD - back

### Switch configurations and port density

 Table 2.
 Cisco 6000 Series Switch port configurations.

Model	HF6100-32D	HF6100-60L4D
Description	Cisco 6000 Hyperfabric switch with 32x400Gbps QSFP-DD	Cisco 6000 Hyperfabric switch with 60x50G SFP28 4x400G QSFP-DD
1G port density (RJ45)	1	1
10G/25/50G port density (SFP-56)	-	601
40G/100G/200G/400G port density (QSFP-DD)	32	4
Breakout support		
10/25G port density with breakout cable	-	60
40G port density with breakout cable	32	4
100G port density with breakout cable	128	16
200G port density with breakout cable	64	8

<sup>&</sup>lt;sup>1</sup> Support for 1G modules requires a specialized 10-to-1 PHY-enabled SFP.

# Platform support

The following table contains a list of Cisco 6000 Series Switches and their supported Cisco Nexus Hyperfabric subscription tiers.

Table 3. Cisco Nexus Hyperfabric switch platform support

Product family	Platforms supported	Subscription feature support
Cisco 6000	HF6100-60L4D, HF6100-32D	Cisco Nexus Hyperfabric Essentials subscription
		Cisco Nexus Hyperfabric Al Premier subscription

### Software requirements

Each Cisco 6000 Series Switch is an appliance that is shipped with an embedded operating system. The operating system is updated remotely by the Cisco Nexus Hyperfabric Cloud Controller on a scheduled basis. No additional software licensing is required to operate a Cisco 6000 Series Switch in combination with an active Cisco Nexus Hyperfabric subscription. A Cisco 6000 Series Switch will continue to operate with the last-known configuration and embedded operating system, if the Cloud Controller is not accessible, or the subscription expires. Recovery of the embedded operating system requires downloading a securely signed disk image from the Nexus Hyperfabric Cloud Controller. All Cisco 6000 Series Switches that are members of a fabric must use the same operating system release and subscription tier. Switches will be automatically updated to the same release when connected to an existing fabric.

# Platform subscriptions

An active <u>Cisco Nexus Hyperfabric</u> subscription is required for every Cisco 6000 switch that is connected to the Nexus Hyperfabric Cloud Controller service. Subscriptions may be initially purchased for 36 to 86 months of operation to support co-term anniversary dates. Subscription renewals are supported for 12 to 84 months. The subscription feature tiers are based on fabric use-cases. At this time there are two packages planned – one for standalone fabrics and the second for Al fabrics. All the switches in a fabric must use the same license tier; however, an organization may concurrently manage multiple separate fabrics that each use different license tiers.

Table 4. Subscription feature tiers

Features	Essentials subscription	Premier subscription, only for Cisco Nexus Hyperfabric Al <sup>1</sup>
Cisco support 8x5xNBD	Yes	Yes <sup>1</sup>
Software upgrades	Yes	Yes <sup>1</sup>
Cloud controller	Yes	Yes <sup>1</sup>
Designer (no purchase required)	Yes	Yes <sup>1</sup>
BOM generation with optics	Yes	Yes <sup>1</sup>
"Helping Hands" deployment assist	Yes	Yes <sup>1</sup>
Plug-and-play deployment	Yes	Yes <sup>1</sup>

Features	Essentials subscription	Premier subscription, only for Cisco Nexus Hyperfabric Al <sup>1</sup>
Spine-leaf topologies	Yes	Yes <sup>1</sup>
Super-spine topologies	No	Yes¹
Data center interconnect topologies	No	Yes¹
Mesh (spineless) topologies	Yes	Yes¹
EVPN/VXLAN underlay (opaque)	Yes	Yes <sup>1</sup>
Static and BGP routing	Yes	Yes¹
MLAG	Yes	Yes <sup>1</sup>
Real-time cloud-accessed telemetry	Yes	Yes¹
IPv4 and IPv6	Yes	Yes <sup>1</sup>
Assertion-based monitoring	Yes	Yes <sup>1</sup>
Survivable data and local management plane	Yes	Yes <sup>1</sup>
Hardware-based attestation and security	Yes	Yes <sup>1</sup>
API for headless provisioning and monitoring	Yes	Yes <sup>1</sup>
Al use-case support	No	Yes <sup>1</sup>

<sup>&</sup>lt;sup>1</sup> This subscription tier is not available at FCS.

# Platform specifications

# **Physical specifications**

 Table 5.
 Specifications of the Cisco 6000 Series Switches

Model	HF6100-32D	HF6100-60L4D
Mount type	1U rack mount	1U rack mount
CPU	Intel Broadwell 2.4 GHz x64 CPU with 4 cores	Intel Broadwell 2.3-GHz x86 CPU with 8 cores
Ram	16GB of DDR4 memory	32 GB of DD4 memory
Weight	31 lbs (14.09 kg) including power supplies and fans	28.10 lbs (12.75kg) including power supplies and fans

Model	HF6100-32D	HF6100-60L4D
Dimensions	H = 1.73 in. (4.40 cm) W = 17.3 in. (43.9 cm) D = 23.6 in. (59.9 cm) including fan/tray handles	H = 1.73 in. (4.39 cm) W = 17.5 in. (44.45 cm) D = 21.8 in. (55.37 cm) including fan/ tray handles
Typical system power	288W at 12.8 Tbps	-
Power supply slots	2	2
Fan slots	6	6
AC power supply	1400W AC front to back 1400W AC back to front 2000W AC front to back 2000W AC back to front	1500W AC front to back
DC power supply	2000W DC front to back 2000W DC back to front	1500W DC front to back
Operating temperature	32 to 104°F (0 to 40°C) at sea level	23 to 133°F (-5 to 45°C) at sea level
Non-operating temperature	-40 to 158°F (-40 to 70°C)	-40 to 158°F (-40 to 70°C)
Humidity	5% to 95%	5% to 95%
Altitude	0 to 9842 ft (0 to 3000 m)	0 to 9842 ft (0 to 3000 m)
МТВБ		

# **Power specifications**

 Table 6.
 HF6100-60L4D power supply specifications

Power supply feature	C9K-PWR-1500WAC	C9K-PWR-1500WDC
Power max rating	1500 Watts	1500 Watts
Input-voltage range and frequency	90-264Vac 47-63Hz	-40Vdc to -72Vdc
Power supply efficiency	92% (115Vac 50% load) 94% (230Vac 50% load)	94% (-48Vdc to -60Vdc, 50% load)
Input current	17A (max) at Vac 100V 7A (max) at Vac 240V	45A (max) at -40Vdc
Output ratings	Main output: 12V 125A Standby output: 3.3V 5A	Main output: 12V 125A Standby output: 3.3V 5A
Output holdup time	12ms	2ms

Power supply feature	C9K-PWR-1500WAC	C9K-PWR-1500WDC
Power-supply input receptacles	C221	C10-638977-00 Amphenol connector
Power cord rating	16A	N/A
BTU output (Note: 1000 BTU/hr = 293W)	3412	3412
MTBF hours	300,000	300,000

 Table 7.
 HF6100-32D power supply specifications

Power supply feature	AC	DC
	PSU1.4KW-ACPI PSU1.4KW-ACPE	
Power max rating	1450 Watts	-
Input-voltage range and frequency	90-264Vac 47-63Hz	-
Power supply efficiency	92% (115Vac 50% load) 94% (230Vac 50% load)	-
Input current	14A (max) at Vac 180Vac 14A (max) at Vac 90Vac	-
Output ratings	Main output: 12V 121A Standby output: 12V 3A	-
Output holdup time	5ms	-
Power-supply input receptacles	C21	-
Power cord rating	16A	-
MTBF hours	1,000,000	-
Power supply feature	PSU2KW-ACPIE	PSU2KW-DCPIE PSU2KW-DCPIE
Power max rating	2000 Watts	2000 Watts
Input-voltage range and frequency	90-264Vac 47-63Hz	-48Vdc to -72Vdc
Power supply efficiency	94% (115Vac 50% load) 96% (230Vac 50% load)	94% (-48Vdc to -60Vdc, 50% load)
Input current	12A (max) at Vac 200Vac 12A (max) at Vac 100Vac	60A (max) at -40Vdc

Power supply feature	AC	DC
	PSU1.4KW-ACPI PSU1.4KW-ACPE	
Output ratings	Main output: 12V 167A Standby output: 12V 3A	Main output: 12V 167A Standby output: 12V 3A
Output holdup time	12ms	5ms
Power-supply input receptacles	C21	C10-747100-000 Amphenol connector
Power cord rating	13A	
BTU output (Note: 1000 BTU/hr = 293W)	-	3,412
MTBF hours	300,000	300,000

# Switch performance

 Table 8.
 Performance of the Cisco 6000 Series Switches

Switching performance numbers	HF6100-32D	HF6100-60L4D
ASIC	Q200	Q200
Switching capacity	Up to 12.8 Tbps <sup>2</sup>	Up to 9.2 Tbps <sup>2</sup>
Forwarding rate	8 Bpps	8 Bpps
Total MAC addresses	Up to 256,000 <sup>1</sup>	Up to 256,000 <sup>1</sup>
Total IPv4 routes (indirect routes)	Up to 1,000,000 <sup>1,3</sup>	Up to 2,000,000 <sup>1,3</sup>
Total IPv4 host routes (direct routes and ARP)	Up to 256,0001 <sup>1,3</sup>	Up to 256,0001 <sup>1,3</sup>
Total IPv6 routes (indirect routes)	Up to 1,000,000 <sup>1,3</sup>	Up to 1,000,000 <sup>1,3</sup>
Total IPv6 host routes (direct routes and NDP)	Up to 128,0001 <sup>1,3</sup>	Up to 128,0001 <sup>1,3</sup>
Total IPv4 multicast routes	Up to 32,000 <sup>1,3</sup>	Up to 32,000 <sup>1,3</sup>
Total IPv6 multicast routes	Up to 16,000 <sup>1,3</sup>	Up to 16,000 <sup>1,3</sup>
QoS ACL scale (v4/v6)	Up to 8,000/4,000 <sup>1,4</sup>	Up to 8,000/4,000 <sup>1,4</sup>
Security ACL scale (v4/v6)	Up to 8,000/4,000 <sup>1,4</sup>	Up to 8,000/4,000 <sup>1,4</sup>
DRAM	16 GB	32 GB
Flash	32 GB	32 GB

Switching performance numbers	HF6100-32D	HF6100-60L4D
ASIC	Q200	Q200
VLAN IDs	4094	4094
Jumbo frame	9,216 bytes	9,216 bytes

<sup>&</sup>lt;sup>1</sup> Denotes hardware capably. All numbers are subject to license and feature limitations. Varies based on selected flexible ASIC template and platform.

### Safety and compliance

Table 9. Cisco 6000 Series Switch safety and compliance list

Description	Specification
HF6100-60L4D	
Safety certifications	<ul> <li>UL 60950-1</li> <li>CAN/CSA-C22.2 No. 60950-1</li> <li>IEC 60950-1</li> <li>AS/NZS 60950-1</li> <li>EN 62368-1</li> <li>UL 62368-1</li> <li>CAN/CSA-C22.2 No. 62368-1</li> <li>IEC 62368-1</li> <li>AS/NZS 62368-1</li> </ul>
EMI and EMC compliance	<ul> <li>CNS13438: 2006 Class A</li> <li>EN 300 386 V1.6.1</li> <li>EN61000-3-2: 2014</li> <li>EN61000-3-3: 2013</li> <li>ICES-003 Issue 6: 2016 Class A</li> <li>KS C 9832:2019</li> <li>CISPR32:2015:Ed:2</li> <li>EN 55032:2012/ AC:2013 Class A</li> <li>EN 55032:2015 Class A</li> <li>CISPR 32 Edition 2 Class A</li> <li>VCCI/CISPR 32 2016</li> <li>CISPR24: 2010 + A1: 2015</li> <li>EN 300 386 V1.6.1</li> <li>EN55024: 2010 + A1: 2015</li> <li>KS C 9835:2019</li> <li>EN 55035:2017+A11:2020</li> <li>47 CFR Part 15:2016</li> </ul>

<sup>&</sup>lt;sup>2</sup> Line rate for 187byte packet size and above

<sup>&</sup>lt;sup>3</sup> Table maximum. The exact percentage of allocation will depend on specific IP/mask combinations.

<sup>&</sup>lt;sup>4</sup> Table maximum. Shared hardware resource. The maximum number of ACEs depends on the number and type of ACLs configured across various interface types.

Description	Specification
HF6100-32D	
Regulatory compliance	Products should comply with CE Markings according to directives 2004/108/EC and 2006/95/EC
Safety certifications	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
EMI and EMC compliance	47 CFR 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 KN32 Class A CNS13438 Class A 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.

# System Requirements

### Host system requirements

Cisco 6000 Series Switches are cloud managed and do not require dedicated software to manage the devices. The Cisco Nexus Hyperfabric Cloud Controller portal requires a web browser to interact with connected devices.

Table 10. Supported web browsers

Supported Browers	Versions
Google Chrome	Version 70 or later
Mozilla Firefox	Version 62 or later
Microsoft Edge	Version 94 or later

## Ordering information

The high-level hardware components are listed below. For full ordering information, refer to the ordering documentation or speak with a Cisco reseller for assistance.

Dropship switch bundles require the hardware and the subscription to be combined in the same purchase transaction. These transactions are fulfilled directly by Cisco and allow customization of accessories at the time of purchase.

Standalone/spare switches may be ordered separately as needed. Each standalone or spare hardware switch comes in a fixed configuration and may be shipped by Cisco or a local Cisco reseller / distributor based on stock availability. Standalone / spare subscriptions are fulfilled by Cisco using an email notification. Hardware spares that are purchased prior to the purchase of a Cisco Nexus Hyperfabric subscription must have their serial number associated to the Subscription, to receive the Cisco Extended Hardware Warranty.

Table 11. Cisco 6000 Series Switch ordering information

Part #	Product description	
HF6100-32D - dropship config	urable PID pairing	
HF6100-32D	Cisco 6000 Hyperfabric switch, 32x400Gbps QSFP-DD switch chassis, hardware bundle	
HF6100-32D-SVC	Cisco Nexus Hyperfabric switch HF6100-32D aaS subscription bundle	
HF6100-32D - standalone / spares PIDs		
HF6100-32D-S	Cisco 6000 Hyperfabric switch, 32x400Gbps QSFP-DD switch chassis, hardware only Front-to-back airflow, AC power supply	
HF6100-32D-SVC-S	Cisco Nexus Hyperfabric switch HF6100-32D aaS subscription only	

Part #	Product description	
HF6100-32D - dropship config	urable PID pairing	
HF6100-60L4D	Cisco 6000 Hyperfabric switch, 60x50G SFP28 4x400G QSFP-DD, hardware bundle	
HF6100-60L4D-SVC	Cisco Nexus Hyperfabric switch HF6100-60L4D aaS subscription bundle	
HF6100-60L4D - standalone / spares PIDs		
HF6100-60L4D-S	Cisco 6000 Hyperfabric switch, 60x50G SFP28 4x400G QSFP-DD, hardware only Front-to-back airflow, AC power supply	
HF6100-60L4D-SVC-S	Cisco Nexus Hyperfabric switch HF6100-60L4D aaS subscription only	

 Table 12.
 Cisco 6000 Series Switch accessories ordering information

Part #	Product description	
HF6100-32D		
Pluggable transceiver modules	Please refer to Cisco's TMG matrix for the list of supported Cisco pluggable transceiver modules <a href="https://tmgmatrix.cisco.com/?si=HF6100-32D">https://tmgmatrix.cisco.com/?si=HF6100-32D</a>	
PSU2KW-DCPI	2000 Watt DC power supply, front-to-back airflow	
PSU2KW-DCPE	2000 Watt DC power supply, back-to-front airflow	
PSU1.4KW-ACPI	1450 Watt AC power supply, front-to-back airflow	
PSU1.4KW-ACPE	1450 Watt AC power supply, back-to-front airflow	
PSU2KW-ACPE	2000 Watt AC power supply, back-to-front airflow	
PSU2KW-ACPI	2000 Watt AC power supply, front-to-back airflow	
N9K-ACC-KIT-1RU-L	19" rackmount 4-post kit, long	
N9K-ACC-KIT-1RU-S	19" rackmount 4-post kit, short	
HF6100-60L4D		
Pluggable transceiver modules	Please refer to Cisco's TMG matrix for the list of supported Cisco pluggable transceiver modules <a href="https://tmgmatrix.cisco.com/?si=HF6100-60L4D">https://tmgmatrix.cisco.com/?si=HF6100-60L4D</a>	
C9K-PWR-1500WAC	1500 Watt AC power supply, front-to-back airflow	
C9K-PWR-1500WDC	1500 Watt DC power supply, front-to-back airflow	
C9500-ACCKITH-19I=	19" rackmount 2 post kit, chassis mid mount	
C9500X-4PTH-KIT=	19" rackmount 4-post kit	
C9500X-ACCKIT-23I	23" rackmount, 4-post kit	

Part #	Product description
PWR-C6-BLANK	Power-supply blank cover
C9500X-FAN-1U-R	Front to back cooling fan
C9500X-FAN-1U-F	Back-to-front cooling fan

### Warranty

#### Cisco base hardware warranty

The Cisco 6000 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).

#### **Cisco Extended Hardware Warranty**

The Cisco 6000 Series Switches that are associated with an active Cisco Nexus Hyperfabric subscription come with an Extended Hardware Warranty that includes Next-Business-Day (NBD) delivery of replacement hardware where available and Cisco® Technical Assistance Center (TAC) support. Your extended warranty is conditional to maintenance of a Cisco Nexus Hyperfabric subscription, which includes a Cisco Extended Hardware Warranty contract. We encourage you to carefully review the warranty terms for your specific product before use. For further information about warranty terms, visit <a href="https://www.cisco.com/go/warranty">https://www.cisco.com/go/warranty</a>.

Table 13. Hardware warranty options

	Base warranty	Extended warranty
Devices covered	Applies to all Cisco 6000 Series Switches	3
Warranty duration	12 Months from date of purchase	The duration of a Cisco Nexus Hyperfabric subscription with the hardware serial number associated to the subscription contract
End-of-life policy	In the event of discontinuance of product manufacture, Cisco warranty support is limited to 2 years from the announcement of discontinuance.	
Hardware replacement	A replacement will be shipped within 10 working days after receipt of the Return Materials Authorization (RMA) request. Actual delivery times might vary depending on customer location.	Cisco or its service center will use commercially reasonable efforts to ship a replacement for NBD delivery, where available after receipt of the Return Materials Authorization (RMA) request. Actual delivery times might vary depending on customer location.
Effective date	Hardware warranty commences from the date of shipment to customer (and in case of resale by a Cisco reseller, not more than 90 days after original shipment by Cisco).	Hardware warranty commences from the date of subscription contract creation for the customer (and in case of resale by a Cisco reseller, not more than 60 days after contract subscription creation date).

	Base warranty	Extended warranty
Cisco TAC support	Cisco will provide during business hours, 8 hours per day, 5 days per week, basic configuration, diagnosis, and troubleshooting of device-level problems for up to a 90-day period from the date of shipment of the originally purchased Cisco 6000 Series Switch product. This support includes basic connectivity to cloud or internet connectivity support beyond the specific device under consideration.	Cisco will provide during business hours, 8 hours per day, 5 days per week, basic configuration, diagnosis, and troubleshooting of device-level problems for up to a 90-day period from the date of shipment of the originally purchased Cisco 6000 Switch Series product. This support does not include solution or network-level support beyond the specific device under consideration.
Cisco.com access	Warranty allows guest access only to Cisco.com.	Warranty allows authorized access to Cisco.com for the purposes of opening a TAC case and creating a Return Materials Authorization (RMA) request based on a registered serial number and support contract.

For further information about Cisco Nexus Hyperfabric offer terms, visit <a href="https://www.cisco.com/c/en/us/about/legal/cloud-and-software-terms.html">https://www.cisco.com/c/en/us/about/legal/cloud-and-software-terms.html</a>.

# Platform sustainability

Information about Cisco's Environmental, Social, and Governance (ESG) initiatives and performance is provided in Cisco's CSR and sustainability <u>reporting</u>.

 Table 14.
 Cisco environmental sustainability information

Sustainability topic		Reference
General	Information on product-material-content laws and regulations	<u>Materials</u>
	Information on electronic waste laws and regulations, including our products, batteries, and packaging	WEEE Compliance
	Information on product takeback and reuse program	Cisco Takeback and Reuse Program
	Sustainability inquiries	Contact: csr_inquiries@cisco.com
	Countries and regions supported	Table 9: Regulatory Compliance
Power	Power (Including pluggables)	Table 5: Card Specifications
Material	Product packaging weight and materials	Contact: environment@cisco.com
	Weight	Table 5: Card Specifications

### Cisco and partner services

Cisco and our global partners offer a wide range of services to help accelerate your success in connecting Cisco 6000 Series Switches to the Nexus Hyperfabric Cloud Controller. Our innovative 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 network control.

Cisco Nexus Hyperfabric subscriptions include proactive support from Cisco Services to help you resolve mission-critical problems with direct access at any time to Cisco network experts and award-winning resources. Spanning the entire network lifecycle, our service offerings help increase investment protection, optimize network operations, support migration operations, and strengthen your IT expertise.

For more information on Cisco Services, visit <a href="https://www.cisco.com/go/services">https://www.cisco.com/go/services</a>.

For more information about Cisco partner services in your area, visit <a href="https://locatr.cloudapps.cisco.com/WWChannels/LOCATR/openBasicSearch.do">https://locatr.cloudapps.cisco.com/WWChannels/LOCATR/openBasicSearch.do</a>

### Cisco Capital

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

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Learn more.

# Document history

**Table 15.** Document history

New or Revised Topic	Described In	Date
Limited Availability	Cisco 6000 Series Hardware Data Sheet	October 28, 2024

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

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