Data sheet Cisco public



# Cisco 6000 Series Switches

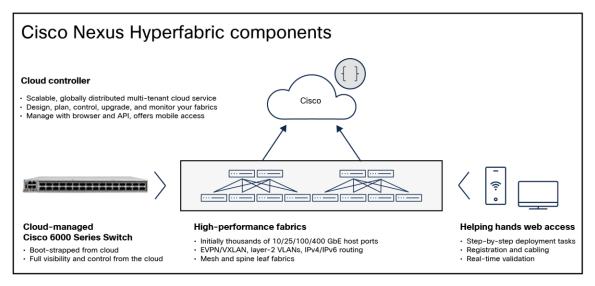
# Contents

Product overview	3
Cisco HF6100 switch models	4
Platform benefits	4
Platform details	6
Switch models and configurations	6
Switch configurations and port density	7
Platform support	7
Software requirements	8
Platform subscriptions	8
Platform specifications	9
Physical specifications	9
Power specifications	10
Switch performance	12
Safety and compliance	13
System requirements	14
Host system requirements	14
Ordering information	15
Fulfillment modes	15
Ways to order	15
Support and warranty	17
Platform sustainability	19
Cisco and partner services	19
Cisco Capital	19
Document history	20

### Product overview

Cisco 6000 Series Switches are cloud-managed network fabric switches. When paired with a <u>Cisco Nexus</u> <u>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, validating, 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 guides 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 QSFP-DD ports
- Has an Intel® Broadwell x86 CPU with 16 or 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. Multi-chassis port channel 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	Yes <sup>1</sup>	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	Yes <sup>1</sup>	Yes <sup>1</sup>
Multicast routing IPv6	Yes <sup>1</sup>	Yes <sup>1</sup>
L3-routed subinterfaces	Yes	Yes
L3 VRF address family	Yes	Yes
BGP Ethernet VPN (EVPN) VXLAN		
Spine role	No	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
Multi-chassis port channel (frontend)	Yes	Yes
L3 border handoff	Yes	Yes
L2 border handoff	Yes	Yes

Model	HF6100-60L4D	HF6100-32D
Virtual eXtensible LAN (VXLAN)	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

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 SFP56+ 4x400G QSFP-DD - front



Figure 5.
HF6100-60L4D: Cisco 6000 Series Switch with 60x 50G SFP56+ 4x400G 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 SFP56 4x400G QSFP-DD
1G port density (RJ45)	1	1
1G/10G/25G/50G port density (SFP56)	-	60¹
40G/100G/200G/400G port density (QSFP-DD)	32	4
Breakout support	Yes	Yes

<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 Nexus Hyperfabric 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

A valid <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 84 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 entitlement tier; however, an organization may concurrently manage multiple separate fabrics that each use different entitlement tiers.

Table 4. Subscription feature tiers

Features	Essentials subscription	Premier subscription, only for Cisco Nexus Hyperfabric Al
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>
Spine-leaf topologies	Yes	Yes <sup>1</sup>
Super-spine topologies	No	Yes <sup>1</sup>
Data center interconnect topologies	No	Yes <sup>1</sup>
Mesh (spineless) topologies	Yes	Yes <sup>1</sup>
EVPN/VXLAN underlay (opaque)	Yes	Yes <sup>1</sup>
Static and BGP routing	Yes	Yes <sup>1</sup>
Multi-chassis port channel	Yes	Yes <sup>1</sup>

Features	Essentials subscription	Premier subscription, only for Cisco Nexus Hyperfabric Al
Real-time cloud-accessed telemetry	Yes	Yes <sup>1</sup>
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
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

Model	HF6100-32D	HF6100-60L4D
AC power supply	1400W AC port intake 1400W AC port exhaust 2000W AC port intake 2000W AC port exhaust	1500W AC port intake
DC power supply	2000W DC port intake 2000W DC port exhaust	1500W DC port intake
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)
MTBF		

# **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 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
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

Power supply feature	AC	DC
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	
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 entitlement and feature limitations. Varies based on selected flexible ASIC template and platform.

<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.

# 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>		
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		

Description	Specification
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 Browser	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.

#### Fulfillment modes

Drop-Ship Orders are hardware orders that are shipped directly from Cisco's manufacturing facility to the customer installation site. Drop-Ship Orders will occur when configurable hardware PIDs are used or when there is insufficient stock available for a Static Hardware Order through a distributor. Static Orders are hardware orders that are eligible for fulfillment through a Cisco distributor in a regional location.

### Ways to order

Cisco Nexus Hyperfabric components may be ordered in the following ways:

- Hardware-only orders
  - Hardware-only orders are used where the Cisco 6000 Series hardware is purchased independently of a Cisco Nexus Hyperfabric Subscription. When hardware is ordered separately, it is covered by Cisco's hardware warranty terms for a limited time. A hardware-only order may be performed using any of the Cisco 6000 Series hardware PIDs.
- Hardware and subscription linked orders
  - Hardware and subscription linked orders are used where the Cisco 6000 Series hardware is purchased along with a Cisco Nexus Hyperfabric subscription. A hardware and subscription linked order may be purchased using any of the Cisco 6000 Series hardware PIDs. When the hardware is purchased together with a linked subscription, an embedded Cisco hardware support agreement is included for the duration of the subscription.
- · Subscription-only orders
  - Subscription-only orders are used where the Cisco Nexus Hyperfabric Subscription is purchased independently of the Cisco 6000 Series hardware. A subscription-only order includes an embedded Cisco hardware support agreement for the duration of the subscription.

Table 11. Cisco 6000 Series Switch ordering information

Part #	Product description
Drop-ship PIDs	
HF6100-32D-D	Cisco 6000 Hyperfabric switch, 32x400Gbps QSFP-DD, configurable hardware only
HF6100-32D-SVC-D	Cisco Nexus Hyperfabric switch HF6100-32D subscription linked bundle
HF6100-60L4D-D	Cisco 6000 Hyperfabric switch, 60x50G SFP56 4x400G QSFP-DD, configurable hardware only
HF6100-60L4D-SVC-D	Cisco Nexus Hyperfabric switch HF6100-60L4D subscription linked bundle

Part #	Product description		
Static configuration PIDs	Static configuration PIDs		
HF6100-32D-S	Cisco 6000 Hyperfabric switch, 32x400Gbps QSFP-DD, fixed hardware only Port exhaust airflow, AC power supply		
HF6100-32D-SVC-S	Cisco Nexus Hyperfabric switch HF6100-32D subscription linked bundle		
HF6100-60L4D-S	Cisco 6000 Hyperfabric switch, 60x50G SFP56 4x400G QSFP-DD, fixed hardware only Port exhaust airflow, AC power supply		
HF6100-60L4D-SVC-S	Cisco Nexus Hyperfabric switch HF6100-60L4D subscription linked bundle		
Subscription-only PIDs			
HF6100-32D-SVC	Cisco Nexus Hyperfabric switch HF6100-32D subscription only		
HF6100-60L4D-SVC	Cisco Nexus Hyperfabric switch HF6100-60L4D 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>
HF6100-32D-NOS	Cisco Nexus Hyperfabric switch HF6100-32D software image
PSU2KW-DCPI	2000 Watt DC power supply, port intake airflow
PSU2KW-DCPE	2000 Watt DC power supply, port exhaust airflow
PSU1.4KW-ACPI	1450 Watt AC power supply, port intake airflow
PSU1.4KW-ACPE	1450 Watt AC power supply, port exhaust airflow
PSU2KW-ACPE	2000 Watt AC power supply, port exhaust airflow
PSU2KW-ACPI	2000 Watt AC power supply, port intake airflow
FAN-1RU-PI-V2	1RU Fan with Port-side Air Intake
FAN-1RU-PE-V2	1RU Fan with Port-side Air Exhaust
N9K-ACC-KIT-1RU-L	19" rackmount 4-post kit, long
N9K-ACC-KIT-1RU-S	19" rackmount 4-post kit, short

Part #	Product description
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>
HF6100-60L4D-NOS	Cisco Nexus Hyperfabric switch HF6100-60L4D software image
C9K-PWR-1500WAC	1500 Watt AC power supply
C9K-PWR-1500WDC	1500 Watt DC power supply
HF-ACC-RM2-4P19L	19" rackmount 4-post kit
PWR-C6-BLANK	Power-supply blank cover
C9500X-FAN-1U-R	Port Intake cooling fan
C9500X-FAN-1U-F	Port exhaust cooling fan

### Support and warranty

### Cisco standard 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 hardware and software Level 1: Success Track support

The Cisco 6000 Series Switches that are associated with an active Cisco Nexus Hyperfabric subscription come with Cisco Return Materials Authorization (RMA) for warranty and hardware support. This warranty coverage includes Next-Business-Day (NBD) delivery of replacement hardware, as well as Cisco Technical Assistance Center (Cisco TAC) support. Your RMA support is conditional to maintaining a Cisco Nexus Hyperfabric subscription, which includes the Level 1: Success Track contract. We encourage you to carefully review the warranty and hardware returns agreement for your specific product before use. For further information about hardware RMA and warranty terms, visit <a href="https://www.cisco.com/go/warranty">https://www.cisco.com/go/warranty</a>.

 Table 13.
 Hardware warranty options

Warranty Topics	Standard hardware warranty	Hardware and software Level 1: Success Track support	
Devices covered	Applies to all Cisco 6000 Series Switches		
Warranty duration	12 Months from date of purchase	The duration of a Cisco Nexus Hyperfabric subscription with the hardware serial number associated with 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 the customer (and in case of resale by a Cisco reseller, not more than 90 days after the 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 the contract subscription creation date).	
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 90 days from the date of shipment of the originally purchased Cisco 6000 Series Switch product. This support includes basic connectivity to the 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 90 days 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	The warranty allows guest access only to Cisco.com.	Warranty allows authorized access to Cisco.com to open a Cisco TAC case and create 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 https://www.cisco.com/c/en/us/about/legal/cloud-and-software/software-terms.html.

### 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 https://www.cisco.com/go/services.

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

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.

<u>Learn more</u>.

# Document history

#### Table 15. Document history

New or Revised Topic	Described In	Date
Limited Availability	Cisco 6000 Series Hardware Data Sheet	October 28, 2024
General Availability	Cisco 6000 Series PID updates.	March 2025

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)

Printed in USA C78-4779975-01 04/25