

# **System Specifications**

- Environmental Specifications, on page 1
- Switch Dimensions, on page 1
- Switch and Module Weights and Quantities, on page 2
- Transceiver and Cable Specifications, on page 2
- Switch Power Input Requirements, on page 2
- Power Specifications, on page 3
- Power Cable Specifications, on page 6
- Regulatory Standards Compliance Specifications, on page 9

### **Environmental Specifications**

Environment		Specification
Temperature	Ambient operating temperature	32 to 104°F (0 to 40°C)
	Ambient nonoperating	-40 to 158°F (-40 to 70°C)
Relative humidity	Nonoperating	5 to 85%
Altitude	Operating	0 to 13,123 feet (0 to 4,000 meters)

## **Switch Dimensions**

Switch	Width	Depth	Height
Cisco Nexus 9272Q	17.4 inches (44.2 cm)	24.5 inches (62.3 cm)	3.5 inches (8.9 cm) (2 RU)

### **Switch and Module Weights and Quantities**

Component	Weight per Unit	Quantity
Cisco Nexus 9272Q Chassis (N9K-C9272Q)	24.6 lb (11.2 kg)	1
Fan Module	_	2
<ul> <li>Port-side exhaust (blue)</li> <li>(N9K-C9300-FAN3-B)</li> <li>Port-side intake (burgundy)</li> <li>(N9K-C9300-FAN3)</li> </ul>	1.42 lb (0.64 kg) 1.42 lb (0.64 kg)	
Power Supply Module – 1200-W AC port-side exhaust (blue) (NXA-PAC-1200W-PE) – 1200-W AC port-side intake (burgundy) (NXA-PAC-1200W-PI) – 1200-W HVAC/HVDC dual-direction (white) (N9K-PUV-1200W) – 930-W DC port-side exhaust (gray) (UCS-PSU-6332-DC) – 930-W DC port-side intake (green) (UCSC-PSU-930WDC) – 930-W DC port-side exhaust (blue) (NXA-PDC-930W-PE) – 930-W DC port-side intake	 2.64 lb (1.2 kg) 2.64 lb (1.2 kg) 2.42 lb (1.1 kg)	2 (1 for operations and 1 for redundancy)

### **Transceiver and Cable Specifications**

To determine which transceivers, adapters, and cables are supported by this switch, see https://www.cisco.com/ c/en/us/support/interfaces-modules/transceiver-modules/products-device-support-tables-list.html.

To see the transceiver specifications and installation information, see https://www.cisco.com/c/en/us/support/ interfaces-modules/transceiver-modules/products-device-support-tables-list.html.

### **Switch Power Input Requirements**

The following table lists the typical amount of power that the switch consumes. It also lists the maximum amount of power that you must provision for the switch and power supply for peak conditions.



Note

Some power supplies have capabilities that are greater than the maximum power requirements for a switch. To determine the power consumption characteristics for the switch, use the typical and maximum requirements that are listed in the following table.

Switch		Maximum Power Consumption (AC or DC)	Heat Dissipation Requirement
Cisco Nexus 9272Q	310 W	975 W	3326.838 BTUs per hour

### **Power Specifications**

Power specifications include the specifications for each type of power supply module.

#### **500-W PHV Power Supply Specifications**

These specifications apply to the following power supplies:

- NXA-PHV-500W
- NXA-PHV-500W-B

Characteristic	Specification
Input voltage	192 to 400 VDC
	90 to 295 VAC
Input frequency	Nominal range: 50 to 60 Hz (Range: 47-63 Hz)
Maximum output power per power supply	500 W
Power supply output voltage	12 V
Power supply standby voltage	12 V
Efficiency rating	Climate Savers Platinum Efficiency (80Plus Platinum certified)
Form factor	RSP1

#### **1200-W AC Power Supply Specifications**

These specifications apply to the following 1200-W AC power supplies:

• NXA-PAC-1200W-PI

Characteristic	Specification
AC input voltage	Nominal range: 100-120 VAC, 200-240 VAC

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Characteristic	Specification
AC input frequency	Nominal range: 50 to 60 Hz (Range: 47-63 Hz)
Maximum AC input current	10 A at 100-120 VAC
	8 A at 200-240 VAC
Maximum output power per power supply	800 W at 100-120 VAC
	1200 W at 200-240 VAC
Maximum hold-up time	12 ms at 650 W
Power supply output voltage	12 VDC
Power supply standby voltage	12 VDC
Efficiency rating	Climate Savers Platinum Efficiency (80Plus Platinum certified)
Form factor	RSP1

### 1200-W HVAC/HVDC Power Supply Specifications

These specifications apply to the 1200-W HVAC/HVDC (N9K-PUV-1200W) power supplies.

Characteristic	Specification
Input voltage	Nominal (Range)
• AC (for 1230 W output)	• 200 to 277 VAC
• DC (for 1230 W output)	• -240 to -380 VDC
AC input frequency	Nominal: 50 to 60 Hz (Range: 47-63 Hz)
Maximum inrush current	35 A (cold turn on); 70 A (hot turn on)
Maximum output Watts	Per power supply
• For 200 to 277 VAC	• 1230 W
• For 192 to 400 VDC	• 1230 W
Power supply output voltage	Per power supply
• For 200 to 277 VAC	• 12 VAC at 100 A
• For 192 to 400 VDC	• 12 VDC at 100 A
Power supply standby voltage	12 V at 2.5 A
Efficiency rating	Climate Savers Platinum Efficiency (80Plus Platinum certified)

Characteristic	Specification
Form factor	RSP1

#### 930-W DC Power Supply (Port-Side Intake) Specifications

These specifications apply to the 930-W DC (UCSC-PSU-930WDC) port-side intake power supplies.

Characteristic	Specification
DC input voltage range	Nominal range: -48 to -60 VDC nominal (Range: -40 to -60 VDC)
Maximum DC input current	23 A at -48 VDC
Maximum input W	1104 W
Maximum output power per power supply	930 W
Maximum inrush current	35 A (sub-cycle duration)
Maximum hold-up time	8 ms at 930 W
Power supply output voltage	12 VDC
Power supply standby voltage	12 VDC
Efficiency rating	Greater than 92% at 50% load
Form factor	RSP1

### 930-W DC Power Supply (Port-Side Exhaust) Specifications

These specifications apply to the 930-W DC (UCS-PSU-6332-DC) power supplies.

Characteristic	Specification
Maximum DC input current	23 A at -48 VDC
Maximum input W	1104 W
Maximum output power per power supply	930 W
Maximum inrush current	35 A at +35° Celcius
Maximum hold-up time	8 ms at 50 % load
Power supply output voltage	12 VDC
Power supply standby voltage	12 VDC
Efficiency rating	Climate Savers Platinum Efficiency (80Plus Platinum certified)

Characteristic	Specification
Form factor	1U

#### 930-W DC Power Supply Specifications

These specifications apply to the following power supplies:

- NXA-PDC-930W-PE
- NXA-PDC-930W-PI

Characteristic	Specification
DC input voltage range	Nominal range: -48 to -60 VDC nominal (Range: -40 to -60 VDC
Maximum DC input current	23 A at -48 VDC
Maximum input W	1104 W
Maximum output power per power supply	930 W
Maximum inrush current	35 A (sub-cycle duration)
Maximum hold-up time	8 ms at 930 W
Power supply output voltage	12 VDC
Power supply standby voltage	12 VDC
Efficiency rating	Greater than 92% at 50% load
Form factor	RSP1

### **Power Cable Specifications**

The following sections specify the power cables that you can order and use with this switch.

#### **AC Power Cables Supported by NX-OS Mode Switches**

Power Type	Power Cord Part Number	Cord Set Description
	CAB-C13-C14-2M	Power Cord Jumper, C13-C14 Connectors, 6.6 feet (2.0 m)
	CAB-C13-CBN	Cabinet jumper power cord, 250 VAC, 10 A, C14-C13 connectors, 2.3 feet (0.7 m)
Argentina	CAB-250V-10A-AR	250 V, 10 A, 8.2 feet (2.5 m)

Power Type	Power Cord Part Number	Cord Set Description
Australia	CAB-9K10A-AU	250 VAC, 10 A, 3112 plug, 8.2 feet (2.5 m)
Brazil	CAB-250V-10A-BR	250 V, 10 A, 6.9 feet (2.1 m)
European Union	CAB-9K10A-EU	250 VAC, 10 A, CEE 7/7 plug, 8.2 feet (2.5 m)
India	CAB-IND-10A	10 A, 8.2 feet (2.5 m)
India	CAB-C13-C14-2M-IN	Power Cord Jumper, C13-C14 Connectors, 6.6 feet (2.0 m)
Israel	CAB-250V-10A-IS	250 V, 10 A, 8.2 feet (2.5 m)
Italy	CAB-9K10A-IT	250 VAC, 10 A, CEI 23-16/VII plug, 8.2 feet (2.5 m)
Japan	CAB-C13-C14-2M-JP	Power Cord Jumper, C13-C14 Connectors, 6.6 feet (2.0 m)
North America	CAB-9K12A-NA	125 VAC, 13 A, NEMA 5-15 plug, 8.2 feet (2.5 m)
North America	CAB-AC-L620-C13	NEMA L6-20-C13, 6.6 feet (2.0 m)
North America	CAB-N5K6A-NA	200/240V, 6A, 8.2 feet (2.5 m)
Peoples Republic of China	CAB-250V-10A-CN	250 V, 10 A, 8.2 feet (2.5 m)
South Africa	CAB-250V-10A-ID	250 V, 10 A, 8.2 feet (2.5 m)
Switzerland	CAB-9K10A-SW	250 VAC, 10 A, MP232 plug, 8.2 feet (2.5 m)
United Kingdom	CAB-9K10A-UK	250 VAC, 10 A, BS1363 plug (13 A fuse), 8.2 (2.5 m)
All except Argentina, Brazil, and Japan	NO-POWER-CORD	No power cord included with switch

### HVAC/HVDC Power Cables Supported by ACI-Mode and NX-OS Mode Switches

Part Number	Cord Set Description	Photo
CAB-HVAC-SD-0.6M	HVAC 2-foot (0.6 m) cable with Saf-D-Grid and SD connectors 277V AC	
		1
CAB-HVAC-RT-0.6M	HVAC 2-foot (0.6 m) cable with	
	Saf-D-Grid and RT connector	
	277V AC	
		1
CAB-HVDC-3T-2M	HVDC	- The -
	6.6-foot (2.0 m) cable with Saf-D-Grid and three terminal connectors	
	300V AC / 400V DC (+200/-200 V DC)	
		1
NO-POWER-CORD	All except Argentina, Brazil, and Japan	Not applicable
	No power cord included with switch	

#### Table 1: HVAC/HVDC Power Cables Callout Table

1	Connect this end to the power supply unit.
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### **DC Power Cable Specifications**

Part Number	Description	Photo
NXA-PDC-930W-PE/PI	The 930W DC power supply (NXA-PDC-930W-PE/PI) is shipped with cable CAB-48DC-40A-8AWG.	

## **Regulatory Standards Compliance Specifications**

The following table lists the regulatory standards compliance for the switch.

Table 2: 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	CAN/CSA-C22.2 No. 60950-1 Second Edition
	• EN 60950-1 Second Edition
	• IEC 60950-1 Second Edition
	• AS/NZS 60950-1
	• GB4943

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Specification	Description
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
EMC: Immunity	• EN55024
	• CISPR24
	• EN300386
	• KN 61000-4 series
RoHS	The product is RoH-6 compliant with exceptions for leaded-ball grid-array (BGA) balls and lead press-fit connectors.