



Specifications

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Rack Specifications

Observe the following rack specifications for the Cisco UCS 6500 Series Fabric Interconnect.

Overview of Racks

You can install the fabric interconnect in the following types of cabinets and racks, assuming an external ambient air temperature range of 0 to 104°F (0 to 40°C):

- Standard perforated cabinets
- Solid-walled cabinets with a roof fan tray (bottom to top cooling)
- Standard open racks



Note If you are selecting an enclosed cabinet, we recommend one of the thermally validated types, either standard perforated or solid-walled with a fan tray.



Note We do not recommend that you use racks that have obstructions (such as power strips), because the obstructions could impair access to field-replaceable units (FRUs).

General Requirements for Cabinets and Racks

The cabinet or rack must also meet the following requirements:

- Standard 19-inch (48.3 cm) (two- or four-post EIA cabinet or rack, with mounting rails that conform to English universal hole spacing per section 1 of ANSI/EIA-310-D-1992). For more information, see [Requirements Specific to Perforated Cabinets, on page 2](#).
- For a one RU (rack unit) fabric interconnect, the minimum vertical rack space requirement per chassis is 1.75 inches (4.4 cm)
- The width between the rack-mounting rails must be at least 17.75 inches (45.0 cm) if the rear of the device is not attached to the rack. For four-post EIA racks, this measurement is the distance between the two front rails.

Four-post EIA cabinets (perforated or solid-walled) must meet the following requirements:

- The minimum spacing for the bend radius for fiber-optic cables should have the front-mounting rails of the cabinet offset from the front door by a minimum of 3 inches (7.6 cm).
- The distance between the outside face of the front mounting rail and the outside face of the back mounting rail should be 23.0 to 30.0 inches (58.4 to 76.2 cm) to allow for rear-bracket installation.

Requirements Specific to Standard Open Racks

If you are mounting the chassis in an open rack (no side panels or doors), ensure that the rack meets the following requirements:

- The minimum vertical rack space per chassis must be equal to the rack unit (RU) of the chassis. One rack unit is equal to 1.75 inches (4.4 cm).
- The distance between the chassis air vents and any walls should be 2.5 inches (6.4 cm).

Requirements Specific to Perforated Cabinets

A perforated cabinet has perforations in its front and rear doors and side walls. Perforated cabinets must meet the following requirements:

- The front and rear doors must have at least a 60 percent open area perforation pattern, with at least 15 square inches (96.8 square cm) of open area per rack unit of door height.
- The roof should be perforated with at least a 20 percent open area.
- The cabinet floor should be open or perforated to enhance cooling.

The Cisco R Series rack conforms to these requirements.

Cable Management Guidelines

To help with cable management, you might want to allow additional space in the rack above and below the chassis to make it easier to route all of the fiber optic or copper cables through the rack.

System Specifications

Observe the following system specifications when installing and operating the Cisco UCS 6500 Series Fabric Interconnect.

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 95%
Altitude	Operating	0 to 13,123 feet (0 to 4,000 meters)

Fabric Interconnect Dimensions

Fabric Interconnect	Width	Depth	Height
Cisco UCS 6536 Fabric Interconnect	17.3 inches (43.9 cm)	24.7 inches (62.7 cm)	1.72 inches (4.4 cm) (1 RU)

Fabric Interconnect and Module Weights and Quantities

Component	Weight per Unit	Quantity
Cisco UCS 6536 Fabric Interconnect Chassis (UCS-6536-FI)	18.8 lb (8.5 kg)	1
Fan Module (UCS-FAN-6536), Port-side exhaust (dark grey)	— 0.6 lb (0.3 kg)	6
Power Supply module – 1100-W AC port-side exhaust (dark grey) (UCS-PSU-6536-AC)	— 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 fabric interconnect, 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>.

Fabric Interconnect Power Input Requirements

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



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

Power Specifications

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

1100-W AC Power Supply Specifications

These specifications apply to the fabric interconnect's AC power supply modules (UCS-PSU-6536-AC).

Characteristic	Specification
AC input voltage	Nominal range: 100 and 240 VAC (Range: 90-132 VAC, 180-264 VAC)
AC input frequency	Nominal range: 50 to 60 Hz (Range: 47-63 Hz)
Maximum AC input current	13 A at 100 VAC 6 A at 240 VAC
Maximum input volt-amperes	1300 VA at 100 VAC
Maximum output power per power supply	1100 W
Maximum inrush current	33 A
Maximum hold-up time	12 ms at 1100 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

Power Cable Specifications

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

Power Cable Specifications for AC Power Supplies

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)
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)
India	CAB-C13-C14-3M-IN	Power Cord Jumper, C13-C14 Connectors, 9.8 feet (3.0 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)

Power Type	Power Cord Part Number	Cord Set Description
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 fabric interconnect

Regulatory Standards Compliance Specifications

The following table lists the regulatory standards compliance for the fabric interconnect.

Table 1: 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	<ul style="list-style-type: none"> • UL 60950-1 • CAN/CSA 22.2 No 60950-1-07 • AS/NZS 60950.1 • EN 60950-1 plus Am2 • IEC 60950-1 plus Am 2 with all country deviations • UL 62368-1 • CAN/CSA 22.2 No 62368-1 • EN 62368-1 • IEC 62368-1 with all country deviations • Additional Certifications may be required as countries adopt new Standards like IEC 62368-1

Specification	Description
EMC: Emissions	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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.

