



CRS 8-Slot Line Card Chassis Enhanced Router Specifications

This appendix provides the specifications for components of the Cisco CRS Carrier Routing System 8-Slot Line Card Chassis Enhanced router.

- [Technical Specifications, on page 1](#)

Technical Specifications

This appendix provides the specifications for components of the Cisco CRS Carrier Routing System 8-Slot Line Card Chassis Enhanced router. This appendix contains the following topics:

Chassis Specifications

[Table 1: Cisco CRS 8-Slot Line Card Chassis Enhanced Router Specifications](#) lists specifications for the Cisco CRS 8-slot Line Card Chassis Enhanced Router.

Table 1: Cisco CRS 8-Slot Line Card Chassis Enhanced Router Specifications

Chassis Dimension	
Height	38.5 in. (97.8 cm)
Width	17.5 in. (44.45 cm) 18.9 in. (48.0 cm) mounting rail flange, outside to outside
Depth	36.6 in. (93.0 cm) without exterior cosmetics 40.5 in. (102.9 cm) with full exterior cosmetics
Weight	330.8 lb (150.1 kg) shipping weight (chassis + inlet grill + 2 power shelves) 430.8 lb (195.4 kg) shipping weight with packaging 747.5 lb. (339.1 kg) fully loaded with line cards and full exterior cosmetics 32 lb (14.5 kg) empty modular power shelf 50 lb (22.7) fully loaded power shelf

Modular Configuration Power Specifications

Table 2: 8-Slot Line Card Chassis Enhanced Router Component and Power Specifications—Modular Configuration Power lists the system specifications for the Cisco CRS 8-slot LCC enhanced router with a modular configuration power system installed.

Table 2: 8-Slot Line Card Chassis Enhanced Router Component and Power Specifications—Modular Configuration Power

Description	Value
Supported Cards and Modules	8 modular services cards (MSCs) or forwarding processor (FP) cards (line cards) 8 physical layer interface modules (PLIMs), one for each MSC or FP 4 switch fabric cards (SFCs) 2 route processor (RP) cards or 2 performance route processor (PRP) cards 1 distributed route processor (DRP) (no dedicated slot; installs in open MSC slot) 1 DRP PLIM (no dedicated slot; installs in PLIM slot corresponding to DRP slot) 2 fan trays (with four fans per fan tray) 1 air filter
Power Shelves	2 AC or 2 DC power shelves (cannot mix AC and DC power shelves in the chassis)
DC power shelf	Accepts up to 4 DC PMs
AC power shelf	Accepts up to 3 AC PMs
Maximum Power Consumption (total input power)	Note Proper grounding is also required at the site to ensure that equipment is not damaged by lightning or power surges.
Maximum DC	9.5 kW (assuming 88% efficiency)
Maximum AC	9.8 kW (assuming 92% efficiency)
Power Redundancy (2N)	
DC	Up to four “A” battery plant feeds required for one power shelf, and up to four “B” battery plant feeds required for the other power shelf.
AC (Delta or Wye 3-phase)	Up to three “A” AC single-phase power sources and up to three “B” AC single-phase power sources required.
DC Input	
Nominal input voltage	–48 VDC North America–60 VDC International(range –40 to –72 VDC)

Description	Value
Input current	50 A max at -48 VDC 40 A max at -60 VDC 60 A at -40 VDC (low voltage extreme)
AC Input, single-phase	
Input voltage	Single-phase 200 to 240 VAC (nominal)(range 180 to 264 VAC)
Line frequency	50 to 60 Hz (nominal)(range 47 to 63 Hz)
Input current	16 A International 20 A North America

Environmental Specifications

Table 3: 8-Slot Line Card Chassis Enhanced Router Environmental Specifications lists the environmental specifications for the Cisco CRS 8-slot LCC enhanced router.

Table 3: 8-Slot Line Card Chassis Enhanced Router Environmental Specifications

Description	Value
Temperature	Operating, nominal: 41° to 104°F (5° to 40°C) Operating, short-term: 23° to 122°F (-5° to 50°C) Nonoperating: -40° to 158°F (-40° to 70°C)
Humidity	Operating: 5 to 85% noncondensing Nonoperating: 5 to 90% noncondensing, short-term operation
Altitude	-196 to 5906 ft (-59.7408 m to 1800 m) at 122°F (50°C), short-term Up to 13,123 ft (4000 m) at 104°F (40°C) or below
Heat dissipation	32,415 BTU per hour (modular configuration DC) ¹ 33,438 BTU per hour (modular configuration AC) ²
External cooling requirements	2.3 tons
Chassis airflow	Up to 1000 cubic feet (28,317 liters) per minute
Power system airflow	Up to 240 cubic feet (6800 liters) per minute
Sound power level (modular configuration power)	77 dB—80°F (27°C) or lower (fan speed 3700 RPM) 89 dB—104°F (40°C) or higher (fan speed 6500 RPM)
Shock and vibration	Designed and tested to meet the NEBS shock and vibration standards defined in GR-63-CORE (Issue 2, April 2002).

¹ Heat dissipation from the DC power system based on maximum output power capacity at 88% efficiency.

² Heat dissipation from the AC power system based on maximum output power capacity at 92% efficiency.

Regulatory, Compliance, and Safety Specification

For information about the compliance and safety standards with which the Cisco CRS 8-slot Line Card Chassis Enhanced router conforms, see [Regulatory Compliance and Safety Information for the Cisco CRS Carrier Routing System](#).