



# Technical Specifications

This appendix provides the technical specifications and management information for the CDE205, CDE220, CDE280, CDE285, CDE420, and CDE460.

This appendix contains the following sections:

- [CDE205 Specifications, page A-1](#)
- [CDE220 Specifications, page A-2](#)
- [CDE280 Specifications, page A-3](#)
- [CDE285 Specifications, page A-4](#)
- [CDE420 Specifications, page A-5](#)
- [CDE460 Specifications, page A-6](#)
- [CDE Management, page A-7](#)
- [CDE Management, page A-7](#)
- [CDE Heat Rate Load, page A-7](#)

## CDE205 Specifications

[Table A-1](#) lists the technical specifications and management information for the CDE205.

**Table A-1**      *CDE205 Specifications*

<b>Rack Units</b>	2
<b>Power</b>	100 to 240 VAC or –48 VDC single power supply; optional redundant power supply available
<b>AC Power Rating</b>	800 W peak
<b>DC Power Rating</b>	710 W peak
<b>AC Electrical Input</b>	<ul style="list-style-type: none"> <li>• AC input voltage low range—Minimum: 100 VAC, Maximum: 127 VAC</li> <li>• AC input voltage high range—Minimum: 200 VAC, Maximum: 240 VAC</li> </ul> <p>See the <a href="#">“If AC Power Supplies Are Installed”</a> section on page 2-9.</p>

Table A-1 CDE205 Specifications

<b>Rack Units</b>	2
<b>DC Electrical Input</b>	DC input voltage range: –36VDC to –75VDC See the <a href="#">“If DC Power Supplies Are Installed”</a> section on page 2-12.
<b>DC Connector Type</b>	Molex
<b>Power Connector Cables</b>	Wire cable gauge 8 AWG
<b>Operating Relative Humidity</b>	8 to 90% (noncondensing)
<b>Nonoperating Relative Humidity</b>	5 to 95% (noncondensing) at temperatures of 73°F to 104°F (23°C to 40°C)
<b>Operating Temperature</b>	50° to 95°F (10 to 35°C)
<b>Nonoperating Temperature</b>	–104° to 158°F (–40° to 70°C)
<b>Operating Altitude</b>	0 to 4000 m
<b>Dimensions (H x W x D)</b>	3.5 x 17.2 x 25.5 in. (8.9 x 43.7 x 64.8 cm)
<b>Weight (fully configured)</b>	52 lb (23.58 kg)
<b>Approvals: Safety</b>	UL/CSA 60950-1
<b>Approvals: EMC</b>	FCC Part 15 (CFR 47) Class A

## CDE220 Specifications

Table A-2 lists the technical specifications and management information for the CDE220.

Table A-2 CDE220 Specifications

<b>Rack Units</b>	2
<b>Power</b>	100 to 240 VAC or –48 VDC redundant power supplies included in all models
<b>Power Rating</b>	800 W peak
<b>DC Power Rating</b>	710 W peak
<b>AC Electrical Input</b>	<ul style="list-style-type: none"> <li>AC input voltage low range—Minimum: 100 VAC, Maximum: 127 VAC</li> <li>AC input voltage high range—Minimum: 200 VAC, Maximum: 240 VAC</li> </ul> See the <a href="#">“If AC Power Supplies Are Installed”</a> section on page 2-9.
<b>DC Electrical Input</b>	DC input voltage range: –36VDC to –75VDC See the <a href="#">“If DC Power Supplies Are Installed”</a> section on page 2-12.
<b>DC Connector Type</b>	Molex
<b>Power Connector Cables</b>	Wire cable gauge 8 AWG
<b>Operating Relative Humidity</b>	8 to 90% (non-condensing)
<b>Nonoperating Relative Humidity</b>	5 to 95% (non-condensing) at temperatures of 73°F to 104°F (23°C to 40°C)

Table A-2 CDE220 Specifications

<b>Rack Units</b>	2
<b>Operating Temperature</b>	50 to 95°F (10 to 35°C)
<b>Nonoperating Temperature</b>	-104 to 158°F (-40 to 70°C)
<b>Operating Altitude</b>	0 to 4000 m
<b>Dimensions (H x W x D)</b>	3.5 x 17.2 x 25.5 in. (8.9 x 43.7 x 64.8 cm)
<b>Weight (fully configured)</b>	52 lb (23.58 kg)
<b>Approvals: Safety</b>	UL/CSA 60950-1
<b>Approvals: EMC</b>	FCC Part 15 (CFR 47) Class A

## CDE280 Specifications

Table A-3 lists the technical specifications and management information for the CDE280.

Table A-3 CDE280 Specifications

<b>Rack Units</b>	2
<b>Power</b>	90 to 264 VAC (self-ranging, 180 to 264 VAC nominal)
<b>Power Rating</b>	1200 W peak
<b>DC Power Rating</b>	930W peak
<b>AC Electrical Input</b>	11 Amps maximum at 100 VAC 7 Amps maximum at 208 VAC
<b>DC Electrical Input</b>	-48 to -60 VDC nominal (self-ranging, -40 to -72 VDC)
<b>DC Connector Type</b>	Amphenol
<b>Power Connector Cables</b>	Wire cable gauge 12 AWG
<b>Operating Relative Humidity</b>	10 to 90%, non-condensing at 82° F (28° C)
<b>Nonoperating Relative Humidity</b>	5 to 93% at 82° F (28° C)
<b>Operating Temperature</b>	41 to 95°F (5 to 35°C) Derate the maximum temperature by 1°C per every 305 meters of altitude above sea level.
<b>Nonoperating Temperature</b>	-40 to 149°F (-40 to 65°C) (when the server is in storage or is transported)
<b>Operating Altitude</b>	0 to 10,000 feet
<b>Dimensions (H x W x D)</b>	3.43 x 17.65 x 29.0 in. (8.7 x 44.8 x 73.80 cm)
<b>W x D (Including handles)</b>	18.96 x 30.18 in. (48.2 x 76.6 cm)
<b>Weight (fully configured)</b>	62.7 lb. (28.4 Kg)
<b>Front Clearance</b>	3 in. (76 mm)
<b>Side Clearance</b>	1 in. (25 mm)

**Table A-3 CDE280 Specifications**

<b>Rack Units</b>	2
<b>Rear Clearance</b>	6 in. (152 mm)
<b>Safety</b>	<ul style="list-style-type: none"> <li>UL 60950-1 Second Edition</li> <li>CAN/CSA-C22.2 No. 60950-1 Second Edition</li> <li>EN 60950-1 Second Edition</li> <li>IEC 60950-1 Second Edition</li> <li>AS/NZS 60950-1</li> <li>GB4943 2001</li> </ul>
<b>EMC - Emissions</b>	<ul style="list-style-type: none"> <li>47CFR Part 15 (CFR 47) Class A</li> <li>AS/NZS CISPR22 Class A</li> <li>CISPR22 Class A</li> <li>EN55022 Class A</li> <li>ICES003 Class A</li> <li>VCCI Class A</li> <li>EN61000-3-2</li> <li>EN61000-3-3</li> <li>KN22 Class A</li> <li>CNS13438 Class A</li> </ul>
<b>EMC - Immunity</b>	<ul style="list-style-type: none"> <li>EN55024</li> <li>CISPR24</li> <li>EN300386</li> <li>KN24</li> </ul>

## CDE285 Specifications

For the technical specifications and management information for CDE285, see [Cisco UCS C240 M4 Server Installation and Service Guide](#).

# CDE420 Specifications

Table A-4 lists the technical specifications and management information for the CDE420.

**Table A-4** CDE420 Specifications

<b>Rack Units</b>	4
<b>Power</b>	100 to 240 VAC or –48 VDC redundant power supplies included in all models
<b>AC Power Rating</b>	950 W peak
<b>DC Power Rating</b>	710 W peak
<b>AC Electrical Input</b>	<ul style="list-style-type: none"> <li>AC input voltage low range—Minimum: 100 VAC, Maximum: 127 VAC</li> <li>AC input voltage high range—Minimum: 200 VAC, Maximum: 240 VAC</li> </ul> <p>See the <a href="#">“If AC Power Supplies Are Installed”</a> section on page 2-9.</p>
<b>DC Electrical Input</b>	<p>DC input voltage range: –48 VDC to –60 VDC</p> <p>See also the <a href="#">“If DC Power Supplies Are Installed”</a> section on page 2-12.</p>
<b>DC Connector Type</b>	Molex
<b>Power Connector Cables</b>	Wire cable gauge 8 AWG
<b>Operating Relative Humidity</b>	8 to 90% (non-condensing)
<b>Nonoperating Relative Humidity</b>	5 to 95% (non-condensing) at temperatures of 73°F to 104°F (23°C to 40°C)
<b>Operating Temperature</b>	50 to 95°F (10 to 35°C)
<b>Nonoperating Temperature</b>	–104 to 158°F (–40 to 70°C)
<b>Operating Altitude</b>	0 to 4000 m
<b>Dimensions (H x W x D)</b>	7.0 x 17.2 x 26 in. (17.8 x 43.7 x 66.0 cm)
<b>Weight (fully configured)</b>	96 lb (43.54 kg)
<b>Approvals: Safety</b>	UL/CSA 60950-1
<b>Approvals: EMC</b>	FCC Part 15 (CFR 47) Class A

# CDE460 Specifications

Table A-5 lists the technical specifications and management information for the CDE460.

**Table A-5 CDE460 Specifications**

<b>Rack Units</b>	4
<b>Power</b>	100 to 240 VAC or –48 VDC redundant power supplies included in all models
<b>AC Power Rating</b>	1280 W peak
<b>DC Power Rating</b>	1010 W peak
<b>AC Electrical Input</b>	<ul style="list-style-type: none"> <li>AC input voltage low range—Minimum: 100 VAC, Maximum: 127 VAC</li> <li>AC input voltage high range—Minimum: 200 VAC, Maximum: 240 VAC</li> </ul> <p>See the <a href="#">“If AC Power Supplies Are Installed”</a> section on page 2-9.</p>
<b>DC Electrical Input</b>	<p>DC input voltage range: –48 VDC to –60 VDC</p> <p>See also the <a href="#">“If DC Power Supplies Are Installed”</a> section on page 2-12.</p>
<b>DC Connector Type</b>	Molex
<b>Power Connector Cables</b>	Wire cable gauge 10 AWG
<b>Operating Relative Humidity</b>	8 to 90% (non-condensing)
<b>Nonoperating Relative Humidity</b>	5 to 95% (non-condensing) at temperatures of 73°F to 104°F (23°C to 40°C)
<b>Operating Temperature</b>	50 to 95°F (10 to 35°C)
<b>Nonoperating Temperature</b>	–104 to 158°F (–40 to 70°C)
<b>Operating Altitude</b>	0 to 3028 m
<b>Dimensions (H x W x D)</b>	7.0 x 17.2 x 26 in. (17.8 x 43.7 x 66.0 cm)
<b>Weight (fully configured)</b>	122 lb (55.39 kg)
<b>Approvals: Safety</b>	UL 60950-1, CSA C22.2
<b>Approvals: EMC</b>	FCC Part 15, Industry Canada ICES-003 issue 4, VCCI, EN55022:2010, CISPR 22:2008, AS/NZS, EN 55024:2010, CISPR 24:2010

# CDE Management

Table A-6 lists the management for all CDE models.

**Table A-6 CDE Management**

<b>Data Rate</b>	2 Gbps maximum
<b>Ports</b>	Console port: DB-9 RS-232 10/100/1000 Mbps Ethernet interface: RJ-45 (management) <b>Note</b> The CDE280 Engine has one RS-232 serial port (RJ-45 connector)
<b>Input Cables</b>	Console port: DB-9 female serial cable Ethernet interface: RJ-45 Category 5E or higher cable

# CDE Heat Rate Load

Table A-7 provides the heat rate load for rack ventilation for each CDE.

**Table A-7 CDE Heat Rate Load**

<b>Platform</b>	<b>Typical Power (Watts)</b>	<b>Typical Heat Dissipation (BTU /Hr)</b>
CDE205	300	1025
CDE220 2A	665	2275
CDE220 2C1	435	1500
CDE220 2C2	635	2175
CDE220 2D1	475	1625
CDE220 2G2	550	1885
CDE250 2G3	600	2052
CDE250 2M0	600	2047
CDE220 2S1	385	1325
CDE220 2S3	510	1750
CDE250 2S5	450	1550
CDE250 2S6	450	1550
CDE250 2S8	450	1535
CDE250 2S9	450	1535
CDE250 2S10	450	1535
CDE250 2S10	450	1535
CDE250 2V0	450	1535
CDE280 2S5	540	1843

**Table A-7** CDE Heat Rate Load (continued)

<b>Platform</b>	<b>Typical Power (Watts)</b>	<b>Typical Heat Dissipation (BTU /Hr)</b>
CDE280 2S10	514	1754
CDE280 2S21	520	1774
CDE280 2H1	404	1379
CDE280 2H13	603	2058
CDE280 2H26	634	2163
CDE420 4A	875	3000
CDE420 4G	980	3350
CDE460 4R1	973 (for DC)	3318 (for DC)