

# **Review the Cisco DNA Center Appliance** Features

- Appliance Hardware Specifications, on page 1
- Front and Rear Panels, on page 4
- Physical Specifications, on page 17
- Environmental Specifications, on page 18
- Power Specifications, on page 19

### **Appliance Hardware Specifications**

Cisco supplies Cisco Digital Network Architecture (DNA) Center in the form of a rack-mountable, physical appliance. The second-generation Cisco DNA Center appliance consists of either a Cisco Unified Computing System (UCS) C220 M5 small form-factor (SFF) chassis or Cisco UCS C480 M5 chassis, both with the addition of one Intel X710-DA2 network interface card (NIC) and one Intel X710-DA4 NIC. Six versions of the second-generation appliance are available:

- 44-core appliance: Cisco part number DN2-HW-APL
- 44-core promotional appliance: Cisco part number DN2-HW-APL-U
- 56-core appliance: Cisco part number DN2-HW-APL-L
- 56-core promotional appliance: Cisco part number DN2-HW-APL-L-U
- 112-core appliance: Cisco part number DN2-HW-APL-XL
- 112-core promotional appliance: Cisco part number DN2-HW-APL-XL-U

The following tables summarize the appliance's hardware specifications.

Feature	Description
Chassis	One rack-unit (1RU) chassis.
Processors	Two 22-core Intel 6238 2.1 GHz processors
Memory	Eight 32 GB DDR4 2933 MHz registered DIMMs (RDIMMs)

Feature	Description
Storage	• 2 x 480 GB in RAID 1
	• 2 x 1.9 TB in RAID 1
	• 6 x 1.9 TB in RAID 10
Disk Management (RAID)	• RAID 1 on slots 1 through 4
	• RAID 10 on slots 5 through 10
Network and Management I/O	Supported connectors:
	Two 10-Gbps Ethernet ports on the Intel X710-DA2 NIC
	• One 1-Gbps RJ-45 management port (Marvell 88E6176)
	• Two 10GBase-T LOM ports (Intel X550 controller embedded on the motherboard)
	The following connectors are available but not typically used in the day-to-day operation of Cisco DNA Center:
	• One RS-232 serial port (RJ-45 connector)
	• One VGA (DB-15) connector
	• Two USB 3.0 connectors
	• One front-panel KVM connector that is used with the KVM cable, which provides two USB 2.0, one VGA (DB-15), and one serial port (RS-232) RJ-45 connector.
	Note that the Intel X710-DA4 NIC, which provides four 10-Gbps Ethernet ports, has been disabled in this release of Cisco DNA Center and will be enabled in a future release of the product.
Power	Two 770 W AC power supplies.
	Redundant as 1+1.
Cooling	Seven hot-swappable fan modules for front-to-rear cooling.
Video	Video Graphics Array (VGA) video resolution up to 1920 x 1200, 16 bpp at 60 Hz, and up to 512 MB of video memory (8 MB is allocated by default).

### Table 2: 56-Core Cisco DNA Center Appliance Hardware Specifications

Feature	Description
Chassis	One rack-unit (1RU) chassis.
Processors	Two 28-core Intel 8280 2.7 GHz processors
Memory	Twelve 32 GB DDR4 2933 MHz RDIMMs

Feature	Description
Storage	• 2 x 480 GB in RAID 1
	• 2 x 1.9 TB in RAID 1
	• 6 x 1.9 TB in RAID 10
Disk Management (RAID)	RAID 1 on slots 1 through 4
	• RAID 10 on slots 5 through 10
Network and Management I/O	Supported connectors:
	• Two 10-Gbps Ethernet ports on the Intel X710-DA2 NIC
	One 1-Gbps RJ-45 management port (Marvell 88E6176)
	• Two 10GBase-T LOM ports (Intel X550 controller embedded on the motherboard)
	The following connectors are available but not typically used in the day-to-day operation of Cisco DNA Center:
	• One RS-232 serial port (RJ-45 connector)
	• One VGA (DB-15) connector
	• Two USB 3.0 connectors
	• One front-panel KVM connector that is used with the KVM cable, which provides two USB 2.0, one VGA (DB-15), and one serial port (RS-232) RJ-45 connector.
	Note that the Intel X710-DA4 NIC, which provides four 10-Gbps Ethernet ports, has been disabled in this release of Cisco DNA Center and will be enabled in a future release of the product.
Power	Two 770 W AC power supplies.
	Redundant as 1+1.
Cooling	Seven hot-swappable fan modules for front-to-rear cooling.
Video	Video Graphics Array (VGA) video resolution up to 1920 x 1200, 16 bpp at 60 Hz, and up to 512 MB of video memory (8 MB is allocated by default).

### Table 3: 112-Core Cisco DNA Center Appliance Hardware Specifications

Feature	Description
Chassis	Four rack-unit (4RU) chassis.
Processors	Two CPU modules, each with two 28-core Intel 8276 2.2 GHz processors
Memory	Twenty-four 32 GB DDR4 2933 MHz RDIMMs

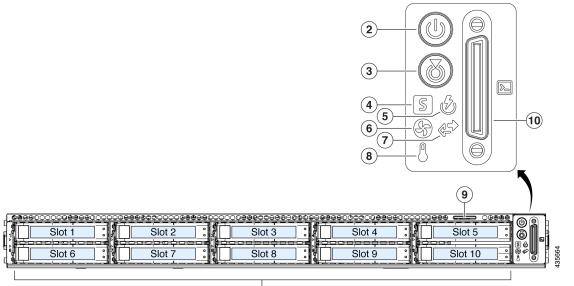
Feature	Description
Storage	• 2 x 480 GB in RAID 1
	• 2 x 3.8 TB in RAID 1
	• 16 x 1.9 TB in RAID 10
Disk Management (RAID)	• RAID 1 on drive bays 1 and 2
	• RAID 10 on slots 3 through 18
	• RAID 1 on drive bays 19 and 20
Network and Management I/O	Supported connectors:
	• Two 10 Gbps Ethernet ports on the Intel X710-DA2 NIC
	Two 10 Base-T Gbps Ethernet ports
	• One Gigabit Ethernet management port
	The following connectors are available but not typically used in the day-to-day operation of Cisco DNA Center:
	• One RS-232 serial port (RJ-45 connector)
	• One VGA (DB-15) connector
	• Three USB 3.0 connectors
	• One front-panel KVM connector that is used with the KVM cable, which provides two USB 2.0, one VGA (DB-15), and one serial port (RS-232) RJ-45 connector.
	Note that the Intel X710-DA4 NIC, which provides four 10-Gbps Ethernet ports, has been disabled in this release of Cisco DNA Center and will be enabled in a future release of the product.
Power	Four 1600 W AC power supplies.
	Redundant as 3+1 (must be configured via the Cisco Integrated Management Controller).
Cooling	Four hot-swappable fan modules with two fans in each for front-to-rear cooling.
Video	VGA video resolution up to 1600 x1200, 16 bpp at 60 Hz, and up to 256 MB of video memory.

### **Front and Rear Panels**

The following figures and tables describe the front and rear panels of the Cisco DNA Center appliance.

Note If you are viewing this guide on Cisco.com, click any of its figures to view a full-sized version.

Figure 1: 44 and 56-Core Appliance Front Panel

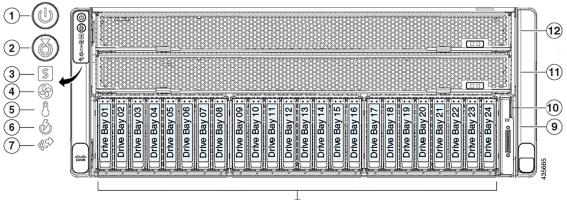


Component	Description
1	A total of 10 drives are available on the appliance:
	• Two 480 GB SAS SSD (in slots 1 and 2).
	• Eight 1.9 TB SATA SSD (in slots 3 through 10).
	Each installed drive has a fault LED and an activity LED.
	When the drive fault LED is:
	• Off: The drive is operating properly.
	• Amber: The drive has failed.
	• Amber, blinking: The drive is rebuilding.
	When the drive activity LED is:
	• Off: There is no drive in the sled (no access, no fault).
	• Green: The drive is ready.
	• Green, blinking: The drive is reading or writing data.

Component	Description
2	Power button/power status LED. When the LED is:
	• Off: There is no AC power to the appliance.
	• Amber: The appliance is in standby power mode. Power is supplied only to the Cisco Integrated Management Controller (Cisco IMC) and some motherboard functions.
	• Green: The appliance is in main power mode. Power is supplied to all the server components.
3	Unit identification button and LED. When the LED is:
	• Off: Unit identification is inactive.
	• Blue: Unit identification is active.
4	System status LED. When the LED is:
	• Green: The appliance is running in a normal operating condition.
	• Green, blinking: The appliance is performing system initialization and memory checks.
	• Amber, steady: The appliance is in a degraded operational state, which may be due to one or more of the following causes:
	• Power supply redundancy is lost.
	• CPUs are mismatched.
	• At least one CPU is faulty.
	• At least one DIMM is faulty.
	• At least one drive in a RAID configuration failed.
	• Amber, 2 blinks: There is a major fault with the system board.
	• Amber, 3 blinks: There is a major fault with the memory DIMMs.
	• Amber, 4 blinks: There is a major fault with the CPUs.
5	Power supply status LED. When the LED is:
	• Green: All power supplies are operating normally.
	• Amber, steady: One or more power supplies are in a degraded operational state.
	• Amber, blinking: One or more power supplies are in a critical fault state.
6	Fan status LED. When the LED is:
	• Green: All fan modules are operating properly.
	• Amber, steady: One fan module has failed.
	• Amber, blinking: Critical fault, two or more fan modules have failed.

Component	Description
7	Network link activity LED. When the LED is:
	• Off: The Ethernet link is idle.
	• Green, blinking: One or more Ethernet LOM ports are link-active, with activity.
	• Green: One or more Ethernet LOM ports are link-active, but there is no activity.
8	Temperature status LED. When the LED is:
	• Green: The appliance is operating at normal temperature.
	• Amber, steady: One or more temperature sensors have exceeded a warning threshold.
	• Amber, blinking: One or more temperature sensors have exceeded a critical threshold.
9	Pull-out asset tag.
10	KVM connector. Used with a KVM cable that provides two USB 2.0, one VGA, and one serial connector.

### Figure 2: 112-Core Appliance Front Panel

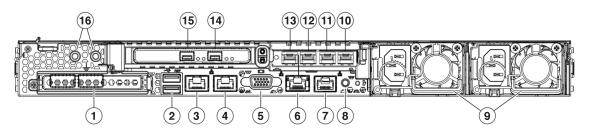


Component	Description
1	Power button/power status LED. When the LED is:
	• Off: There is no AC power to the appliance.
	• Amber: The appliance is in standby power mode. Power is supplied only to the Cisco IMC and some motherboard functions.
	• Green: The appliance is in main power mode. Power is supplied to all the server components.

Component	Description
2	Unit identification button and LED. When the LED is:
	• Off: Unit identification is inactive.
	• Blue: Unit identification is active.
3	System status LED. When the LED is:
	• Green: The appliance is running in a normal operating condition.
	• Amber, steady: The appliance is in a degraded operational state, which may be due to one or more of the following causes:
	Power supply redundancy is lost.
	• CPUs are mismatched.
	• At least one CPU is faulty.
	• At least one DIMM is faulty.
	• At least one drive in a RAID configuration failed.
	• Amber, blinking: The appliance is in a critical fault state, which may be due to one or more of the following causes:
	• Boot failure
	• Fatal processor and/or bus error detected
	Over-temperature condition
4	Fan status LED. When the LED is:
	• Green: All fan modules are operating properly.
	• Amber, steady: Fan modules are in a degraded state. One fan module has a fault.
	• Amber, blinking: Two or more fan modules have faults.
5	Temperature status LED. When the LED is:
	• Green: The appliance is operating at normal temperature. No error conditions detected.
	• Amber, steady: One or more temperature sensors have exceeded a warning threshold.
	• Amber, blinking: One or more temperature sensors have exceeded a critical non-recoverable threshold.
6	Power supply status LED. When the LED is:
	• Green: All power supplies are operating normally.
	• Amber, steady: One or more power supplies are in a degraded operational state.
	• Amber, blinking: One or more power supplies are in a critical fault state.

Component	Description	
7	Network link activity LED. When the LED is:	
	• Off: The Ethernet LOM port link is idle.	
	• Green: One or more Ethernet LOM ports are link-active, but there is no activity.	
	• Green, blinking: One or more Ethernet LOM ports are link-active, with activity.	
8	A total of 20 drives are available on the appliance:	
	• Two 480 GB SATA SSD (in drive bays 1 and 2).	
	• Sixteen 1.9 TB SATA SSD (in slots 3 through 18).	
	• Two 3.8 TB SATA SSD (in drive bays 19 and 20).	
	<b>Note</b> Drive bays 21 through 24 are not used by the appliance.	
	Each installed drive has a fault LED and an activity LED.	
	When the drive fault LED is:	
	• Off: The drive is operating properly.	
	• Amber: The drive has failed.	
	• Amber, blinking: The drive is rebuilding.	
	When the drive activity LED is:	
	• Off: There is no drive in the sled (no access, no fault).	
	• Green: The drive is ready.	
	• Green, blinking: The drive is reading or writing data.	
9	KVM connector. Used with a KVM cable that provides two USB 2.0, one VGA, and one serial connector.	
10	Pull-out asset tag.	
11	CPU module bay 1.	
12	CPU module bay 2.	

Figure 3: 44 and 56-Core Appliance Rear Panel



**Note** If NIC bonding has been enabled on your Cisco DNA Center appliance, two instances of the Enterprise, Intracluster, Management, and Internet port are available to configure and use. See NIC Bonding Overview for more information.

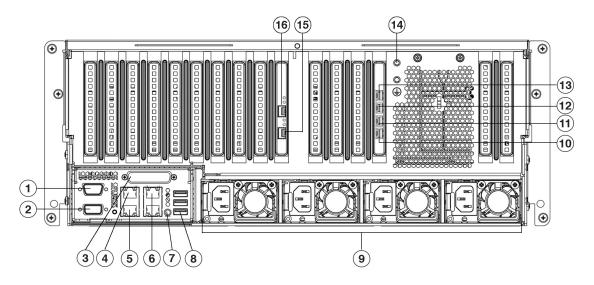
Callout	Description	
1	Modular LAN-on-motherboard (mLOM) card bay (x16 PCIe lane)	
2	Two USB 3.0 ports	
3, 10	<ul> <li>1-Gbps/10-Gbps Management Port (Network Adapter 3): This Ethernet port can support 1 Gbps and 10 Gbps, depending on the link partner capability. It is identified as Network Adapter 3 in the Maglev Configuration wizard. Connect this port to a switch that provides access to your enterprise management network.</li> <li>The primary instance (callout 3) is labeled 1 on the rear panel.</li> <li>The secondary instance (callout 10) is the fourth port on the Intel X710-DA4 NIC in the appliance's PCIe riser 2/slot 2.</li> <li>This port has a link status LED and a link speed LED. When the status LED is:</li> </ul>	
	<ul> <li>Off: No link is present.</li> <li>Green, blinking: Traffic is present on the active link.</li> <li>Green: Link is active, but there is no traffic present.</li> </ul>	
	<ul> <li>When the speed LED is:</li> <li>Off: Link speed is 10 Mbps or less.</li> <li>Green: Link speed is 1 Gbps.</li> <li>Amber: Link speed is 100 Mbps.</li> </ul>	

Callout	Description	
4, 11	1-Gbps/10-Gbps Internet Port (Network Adapter 4): This Ethernet port can support 1 Gbps and 10 Gbps, depending on the link partner capability. It is identified as Network Adapter 4 in the Maglev Configuration wizard. This port is optional and is used for connecting to the Internet when it is not possible to do so via the 10-Gbps Enterprise port. Connect to the Internet or a proxy server that has connections to the Internet.	
	• The primary instance (callout 4) is labeled 2 on the rear panel.	
	• The secondary instance (callout 11) is the third port on the Intel X710-DA4 NIC in the appliance's PCIe riser 2/slot 2.	
	This port has a link status LED and a link speed LED. When the link status LED is:	
	• Off: No link is present.	
	• Green, blinking: Traffic is present on the active link.	
	• Green: Link is active, but there is no traffic.	
	When the speed LED is:	
	• Off: Link speed is 10 Mbps or less.	
	• Green: Link speed is 1 Gbps.	
	• Amber: Link speed is 100 Mbps.	
5	VGA video port (DB-15).	
6	1-Gbps Cisco IMC Port: This is the embedded port to the right of the VGA video port and to the left of the RJ45 serial port. It is assigned an IP address when you enable browser access to the appliance's Cisco IMC GUI (see Enable Browser Access to Cisco Integrated Management Controller). This port is reserved for out-of-band management of the appliance chassis and software. Connect this port to a switch that provides access to your enterprise management network.	
	This port has a link status LED and a link speed LED. When the link status LED is:	
	• Off: No link is present.	
	• Green, blinking: Traffic is present on the active link.	
	• Green: Link is active, but there is no traffic present.	
	When the speed LED is:	
	• Off: Link speed is 10 Mbps or less.	
	• Green: Link speed is 1 Gbps.	
	• Amber: Link speed is 100 Mbps.	
7	Serial port (RJ-45 connector)	
8	Rear unit identification button and LED	

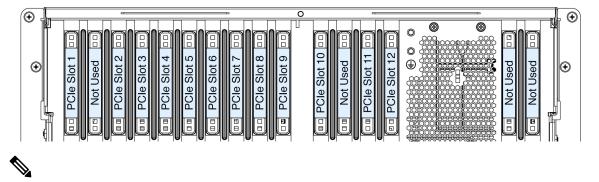
Callout	Description	
9	Power supplies (up to two: redundant as 1+1). Each power supply has a power supply fault LED and an AC power LED.	
	When the fault LED is:	
	• Off: The power supply is operating normally.	
	• Amber, blinking: An event warning threshold has been reached, but the power supply continues to operate.	
	• Amber, solid: A critical fault threshold has been reached, causing the power supply to shut down (for example, a fan failure or an over-temperature condition).	
	When the AC Power LED is:	
	• Off: There is no AC power to the power supply.	
	• Green, solid: AC power is OK, DC output is OK.	
	• Green, blinking: AC power is OK, DC output is not enabled.	
	For more details, see Power Specifications.	
12, 15	10-Gbps Enterprise Port (Network Adapter 1): This port is identified as Network Adapter 1 in the Maglev Configuration wizard. Connect it to a switch with connections to the Enterprise network.	
	• The primary instance (callout 15) is the left-hand port on the Intel X710-DA2 NIC in the appliance's PCIe riser 1/slot 1.	
	• The secondary instance (callout 12) is the second port on the Intel X710-DA4 NIC in the appliance's PCIe riser 2/slot 2.	
	This port has a link status (ACT) LED and a link speed (LINK) LED.	
	When the link status LED is:	
	• Off: No link is present.	
	• Green, blinking: Traffic is present on the active link.	
	• Green: Link is active, but there is no traffic present.	
	When the speed LED is:	
	• Off: Link speed is 100 Mbps or less.	
	• Green: Link speed is 10 Gbps.	
	• Amber: Link speed is 1 Gbps.	
	<b>Note</b> Although capable of operating at lower speeds, this port is intended to operate at 10 Gbps only.	

Callout	Description	
13, 14	10-Gbps Intracluster Port (Network Adapter 2): This port is identified as Network Adapter 2 in the Maglev Configuration wizard. Connect this port to a switch with connections to the other nodes in the cluster.	
	• The primary instance (callout 14) is the right-hand port on the Intel X710-DA2 NIC in the appliance PCIe riser 1/slot 1.	
	• The secondary instance (callout 13) is first port on the Intel X710-DA4 NIC in the appliance's PCIe riser 2/slot 2.	
	This port is located on the Intel X710-DA4 NIC, which is located in the appliance's PCIe riser 2/slot 2.	
	This port has a link status (ACT) LED and a link speed (LINK) LED.	
	When the link status LED is:	
	• Off: No link is present.	
	• Green, blinking: Traffic is present on the active link.	
	• Green: Link is active, but there is no traffic present.	
	When the link speed LED is:	
	• Off: Link speed is 100 Mbps or less.	
	• Green: Link speed is 10 Gbps.	
	• Amber: Link speed is 1 Gbps.	
	<b>Note</b> Although capable of operating at lower speeds, this port is intended to operate at 10 Gbps only.	
16	Threaded holes for dual-hole grounding lug.	

Figure 4: 112-Core Appliance Rear Panel



#### Figure 5: 112-Core Appliance Rear Panel Slots



Note

If NIC bonding has enabled on your Cisco DNA Center appliance, two instances of the Enterprise, Intracluster, Management, and Internet port are available to configure and use. See NIC Bonding Overview for more information.

Callout	Description	
1	Serial port COM 1 (DB-9 connector)	
2	VGA video port (DB-15 connector)	
3	Not used at this time	
4, 13	1-Gbps/10-Gbps Management Port (Network Adapter 3): This Ethernet port can support 1 Gbps and 10 Gbps, depending on the link partner capability. It is identified as Network Adapter 3 in the Maglev Configuration wizard. Connect this port to a switch that provides access to your enterprise management network.	
	• The primary instance (callout 4) is labeled <b>1</b> on the rear panel.	
	• The secondary instance (callout 13) is the top port on the Intel X710-DA4 NIC in the appliance's PCIe riser 2/slot 12.	
	This port has a link status LED and a link speed LED. When the status LED is:	
	• Off: No link is present.	
	• Green, blinking: Traffic is present on the active link.	
	• Green: Link is active, but there is no traffic present.	
	When the speed LED is:	
	• Off: Link speed is 10 Mbps or less.	
	• Green: Link speed is 1 Gbps.	
	• Amber: Link speed is 100 Mbps.	

Callout	Description
5, 12	1-Gbps/10-Gbps Internet Port (Network Adapter 4): This Ethernet port can support 1 Gbps and 10 Gbps, depending on the link partner capability. It is identified as Network Adapter 4 in the Maglev Configuration wizard. This port is optional and is used for connecting to the Internet when it is not possible to do so via the 10-Gbps Enterprise port. Connect to the Internet or a proxy server that has connections to the Internet.
	• The primary instance (callout 5) is labeled <b>2</b> on the rear panel.
	• The secondary instance (callout 12) is the second port from the top on the Intel X710-DA4 NIC in the appliance's PCIe riser 2/slot 12.
	This port has a link status LED and a link speed LED. When the link status LED is:
	• Off: No link is present.
	• Green, blinking: Traffic is present on the active link.
	• Green: Link is active, but there is no traffic.
	When the speed LED is:
	• Off: Link speed is 10 Mbps or less.
	• Green: Link speed is 1 Gbps.
	• Amber: Link speed is 100 Mbps.
6	1-Gbps Cisco IMC Port: This is the 10/100/1000 Ethernet dedicated management port (Base-T), which is located to the right of the Management port. It is identified as <b>3</b> on the rear panel. This port is assigned an IP address when you enable browser access to the appliance's Cisco IMC GUI (see Enable Browser Access to Cisco Integrated Management Controller). It is reserved for out-of-band management of the appliance chassis and software. Connect this port to a switch that provides access to your enterprise management network.
	This port has a link status LED and a link speed LED. When the link status LED is:
	• Off: No link is present.
	• Green, blinking: Traffic is present on the active link.
	• Green: Link is active, but there is no traffic present.
	When the speed LED is:
	• Off: Link speed is 10 Mbps or less.
	• Green: Link speed is 1 Gbps.
	• Amber: Link speed is 100 Mbps.
7	Rear identification button/LED
8	Three USB 3.0 ports
. <u> </u>	

Callout	Description	
9	Power supplies 1 – 4: hot-swappable and redundant as 3+1 (configured in Cisco IMC).See Power Specifications for more information.	
10, 15	10-Gbps Intracluster Port (Network Adapter 2): This port is identified as Network Adapter 2 in the Maglev Configuration wizard. Connect this port to a switch with connections to the other nodes in the cluster.	
	• The primary instance (callout 15) is the bottom port on the Intel X710-DA2 NIC in the appliance PCIe riser 1/slot 9.	
	• The secondary instance (callout 10) is the bottom port on the Intel X710-DA4 NIC in the appliance's PCIe riser 2/slot 12.	
	This port has a link status (ACT) LED and a link speed (LINK) LED.	
	When the link status LED is:	
	• Off: No link is present.	
	• Green, blinking: Traffic is present on the active link.	
	• Green: Link is active, but there is no traffic present.	
	When the link speed LED is:	
	• Off: Link speed is 100 Mbps or less.	
	• Green: Link speed is 10 Gbps.	
	• Amber: Link speed is 1 Gbps.	
	<b>Note</b> Although capable of operating at lower speeds, this port is intended to operate at 10 Gbps only.	

Callout	Description	
11, 16	10-Gbps Enterprise Port (Network Adapter 1): This port is identified as Network Adapter 1 in the Maglev Configuration wizard. If NIC bonding is enabled on your appliance, connect this port to a switch with connections to the enterprise network.	
	• The primary instance (callout 16) is the top port on the Intel X710-DA2 NIC in th appliance PCIe riser 1/slot 9.	
	• The secondary instance (callout 11) is the third port from the top on the Intel X710-DA4 NIC in the appliance's PCIe riser 2/slot 12.	
	This port has a link status (ACT) LED and a link speed (LINK) LED.	
	When the link status LED is:	
	• Off: No link is present.	
	• Green, blinking: Traffic is present on the active link.	
	• Green: Link is active, but there is no traffic present.	
	When the speed LED is:	
	• Off: Link speed is 100 Mbps or less.	
	• Green: Link speed is 10 Gbps.	
	• Amber: Link speed is 1 Gbps.	
	<b>Note</b> Although capable of operating at lower speeds, this port is intended to operate at 10 Gbps only.	
14	Threaded holes for dual-hole grounding lug.	

# **Physical Specifications**

The following table lists the physical specifications for the appliance. Unless indicated, the specifications apply to the 44, 56, and 112-core appliances.

#### Table 4: Physical Specifications

Description	Specification
Height	44 and 56-core appliance: 1.7 in. (4.32 cm)
	112-core appliance: 6.9 in. (17.6 cm)
Width	44 and 56-core appliance:
	• Without handles: 16.9 in. (43.0 cm)
	• Including handles: 19.0 in. (48.3 cm)
	112-core appliance: 19.0 in. (48.3 cm)

Description	Specification
Depth (length)	44 and 56-core appliance:
	• Without handles: 29.8 in. (75.6 cm)
	• Including handles: 30.98 in. (78.7 cm)
	112-core appliance: 32.7 in. (83.1 cm)
Front Clearance	3 in. (76 mm)
Side Clearance	1 in. (25 mm)
Rear Clearance	6 in. (152 mm)
Maximum weight (fully loaded chassis)	44 and 56-core appliance: 37.5 lb. (17.0 kg)
	112-core appliance: 146 lb. (66.2 kg)

## **Environmental Specifications**

The following table lists the environmental specifications for the Cisco DNA Center appliance. Unless indicated, the specifications apply to the 44, 56, and 112-core appliances.

#### Table 5: Environmental Specifications

Description	Specification
Temperature, operating	41 to 95°F (5 to 35°C)
	Derate the maximum temperature by 1°C for every 1000 ft. (305 meters) of altitude above sea level.
Temperature, nonoperating (when the appliance is stored or transported)	-40 to 149°F (-40 to 65°C)
Humidity (RH), operating	10 to 90%, noncondensing at 82°F (28°C)
Humidity (RH), nonoperating (when the appliance is stored or transported)	5 to 93% at 82°F (28°C)
Altitude, operating	0 to 10,000 ft. (0 to 3,048 m)
Altitude, nonoperating (when the appliance is stored or transported)	0 to 40,000 ft. (0 to 12,192 m)

Description	Specification
Sound power level, measure A-weighted per ISO7779 LwAd (Bels), operation at 73°F (23°C)	44 and 56-core appliance: 5.5
	112-core appliance:
	Minimum configuration: 7.08
	Typical configuration: 7.67
	Maximum configuration: 8.24
Sound pressure level, measure A-weighted per ISO7779 LpAm (dBA), Operation at 73°F (23°C)	44 and 56-core appliance: 40
	112-core appliance:
	Minimum configuration: 57.6
	• Typical configuration: 63.5
	Maximum configuration: 70.5

# **Power Specifications**

The specifications for the power supplies provided with the Cisco DNA Center appliance are listed in the table below. The 44 and 56-core appliance ships with two 770 W power supplies (Cisco part number UCSC-PSU1-770W) and the 112-core appliance ships with four 1600 W AC power supplies (Cisco part number UCSC-PSU1-1600W). Unless indicated, the specifications apply to both power supplies.

Description	Specification
AC input voltage	770 W:
	• Nominal range: 100–120 VAC, 200–240 VAC
	• Range: 90–132 VAC, 180–264 VAC
	1600 W:
	Nominal range: 200–240 VAC
	• Range: 180–264 VAC
AC input frequency	Nominal range: 50 to 60 Hz
	(Range: 47–63 Hz)

Description	Specification
Maximum AC input current	770 W:
	• 9.5 A at 100 VAC
	• 4.5 A at 208 VAC
	1600 W: 9.5 A at 200 VAC
Maximum input volt-amperes	770 W: 950 VA at 100 VAC
	1600 W: 1250 VA at 200 VAC
Maximum output power per PSU	770 W: 100–120 VAC
	1600 W: 200–240 VAC
Maximum inrush current	770 W: 15 A at 35° C
	1600 W: 30 A at 35° C
Maximum hold-up time	770 W: 12 ms
	1600 W: 80 ms at
Power supply output voltage	12 VDC
Power supply standby voltage	12 VDC
Efficiency rating	Climate Savers Platinum Efficiency (80Plus Platinum certified)
Form factor	RSP2
Input connector	IEC320 C14

Note

You can get more specific power information for the exact configuration of your appliance by using the Cisco UCS Power Calculator: http://ucspowercalc.cisco.com