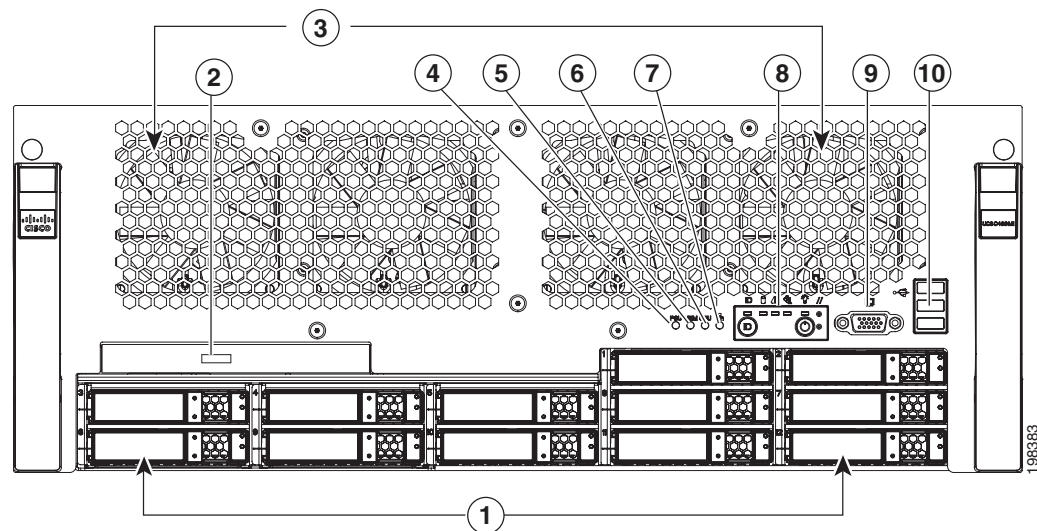# Overview

This chapter provides an overview of the Cisco UCS C460 server features.

The Cisco UCS C460 server is a part of the Cisco UCS C-Series rack-mount server family. It is a high-performance, high-memory-capacity server designed with the performance and reliability to power compute-intensive, enterprise-critical standalone applications and virtualized workloads.It operates in a wide range of data center environments. These environments include the Cisco Unified Computing System, the Cisco Nexus switches, and discrete Ethernet and Fibre Channel switches from Cisco and third parties.
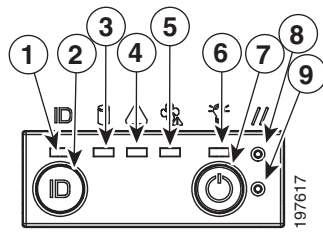
Figure 1-1 shows the front panel features.

Figure 1-1   Front Panel Features

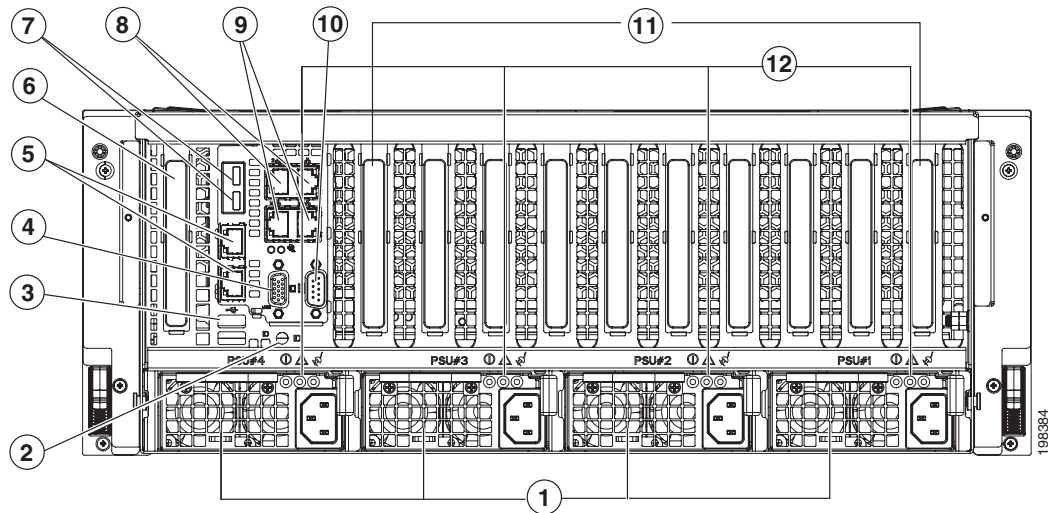| **1**	HDDs, up to twelve	**2**	DVD drive
3	Fans, up to eight	**4**	Power supply status LED
5	Memory status LED	**6**	CPU status LED
7	Network activity LED	**8**	Operations panel (see Figure 1-2 for a detailed view)
9	VGA connector	**10**	USB ports, three

Figure 1-2 shows the operations panel LEDs and buttons.

Figure 1-2   Operations Panel LEDs and Buttons

1	ID LED	**2**	ID button
3	HDD fault LED	**4**	System health LED
5	Fan fault LED	**6**	Power status LED
7	Power button	**8**	Reset button
9	NMI button		

Figure 1-3 shows the rear panel features.

Figure 1-3   Rear Panel Features

1	Power supplies, up to four	**2**	ID button
3	USB ports, two total	**4**	VGA connector
5	10GBase-T LOM ports, two total	**6**	SAS riser slot
7	10G SFP+ LOM ports, two total	**8**	1G LOM ports, two total
9	10/100 Management ports M1 and M2	**10**	Serial connector
11	PCIe slots 1 through 10 (left to right as shown)	**12**	Power supply LEDs

Table 1-1 lists the features of the C460 server.

Table 1-1   Cisco UCS C460 Server Features

Chassis	Four rack-unit (4RU) chassis
Processors	• Cisco UCS C460 M1 server: Either 2 or 4 Intel Xeon 7500 Series processors. • Cisco UCS C460 M2 server: Either 2 or 4 Intel E7-4800 or E7-8800 Series processors. Two-CPU configurations require 2 power supplies and 4-CPU configurations require 4 power supplies.
Memory	Up to 64 DIMMs[1], populated in 8 slots on each of the 8 memory risers. Up to 512 GB of industry-standard DDR3[2] memory.
Multi-bit error protection	This server supports multi-bit error protection.
Storage	Up to twelve, 2.5" SAS[3] or SATA[4] hard drives or solid state drives. Up to 6 TB of hot-pluggable storage.
Disk Management	Factory-configured RAID[5] support options: • RAID 0, 1, and 10 support for up to 8 SAS or SATA drives, with the optional LSI MegaRAID SAS 9240-8i RAID controller • RAID 0, 1, 5, 6, 10, 50, and 60 support for up to 12 SAS or SATA drives, with the optional LSI MegaRAID SAS 9260-8i RAID controller There is a dedicated SAS riser slot for the RAID controller card in the chassis. There is also a mounting point inside the chassis for the optional RAID battery backup unit that is available when using the LSI MegaRAID SAS 9260-8i controller. See RAID Controller Considerations, page C-1 for more information.
PCIe I/O	Ten PCIe[6] expansion slots, four hot-pluggable. See Replacing a PCIe Card, page 3-38 for details.
InfiniBand	The bus slots in this server support the InfiniBand architecture.

Table 1-1 **Cisco UCS C460 Server Features (continued)**

Network and management I/O	The server provides these rear-panel connectors:
	• Two dedicated 10/100 Ethernet management ports
	• Two 1Gb Ethernet ports
	These integrated Gigabit ports support the Wake on LAN (WoL) and TCP/IP Offload Engine (TOE) standards.
	• Two 10Gb Base-T Ethernet ports
	• Two 10Gb SFP+ Ethernet ports
	Note See Using the 10 Gb Ports, page 2-12 for more information about the SFP+ and 10GBase-T 10 Gb ports.
	• One DB9 serial connector.
	• One 15-pin VGA[7] connector.
	• Two USB[8] 2.0 connectors.
	The server provides these front-panel connectors:
	• One 15-pin VGA connector.
	• Three USB 2.0 connectors.
WoL	The 1-Gb Base-T Ethernet LAN ports support the wake-on-LAN (WoL) standard.
Power	Either 2 or 4 power supplies, 850W each. Hot-swappable, rear-accessible, and redundant as 2+2 or 3+1.
	Note You can use 2 power supplies with a 2-CPU configuration. In this case, 1+1 redundancy is supported only if your server's overall power consumption can be supported by a single 850W power supply during the failure and hot-swap. For more information about your server's power consumption, consult with your Cisco sales representative or use the power calculator accessible at the Unified Computing System Partner Resource Center: http://www.ciscoprc.com/resourcelib.asp?id=937
ACPI	This server supports the advanced configuration and power interface (ACPI) 4.0 standard.
Cooling	Up to 8 fans, hot-swappable, redundant as 7+1, or non-redundant as 4. Also, there are 4 fans in each power supply for lower-section cooling.
Removable media	One DVD drive. The drive supports the following media types: CD-R, CD-ROM, CD-RW, DVD+R, DVD+RW, DVD-R, DVD-ROM, DVD-RW, +R DL

1. DIMM = dual inline memory module
2. DDR = double data rate (transfer mode)
3. SAS = serial attached SCSI
4. SATA = serial advanced technology attachment
5. RAID = redundant array of independent disks
6. PCIe = peripheral component interconnect express
7. VGA = video graphics array
8. USB = universal serial bus