Spec Sheet

Cisco UCS C240 M3 NEBS High-Density Rack Server (Small Form Factor Disk Drive Model)

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Overview

The UCS C240 M3 Network Building Equipment Standards (NEBS) rack server is designed for both performance and expandability over a wide range of storage-intensive infrastructure workloads from big data to collaboration.

The product identifier (PID) for the server is UCSC-C240-SNEBS.

This document is a supplement to the Cisco UCS C240 M3 SFF technical specification, found at the following link:

http://www.cisco.com/en/US/prod/collateral/ps10265/ps10493/C240M3_SFF_SpecSheet.pdf

This document describes the differences between the Cisco UCS C240 Server and the network equipment building system- (NEBS-) compliant Cisco UCS C240 NEBS server. This document contains the following sections:

- *Features Specific to the Cisco UCS NEBS Server, page 4*
- *Related Documentation, page 8*

Features Specific to the Cisco UCS NEBS Server

NEBS Compliance

The Cisco UCS 240 NEBS server is certified for NEBS compliance as follows:

- NEBS Level 1 and 3 compliance when using the 930 W DC power supplies
- NEBS Level 1 compliance when using the 650 W AC power supplies

Power Supplies

The Cisco UCS 240 NEBS server can use one or two 650 W AC power supplies or one or two 930 W, -48 VDC power supplies.

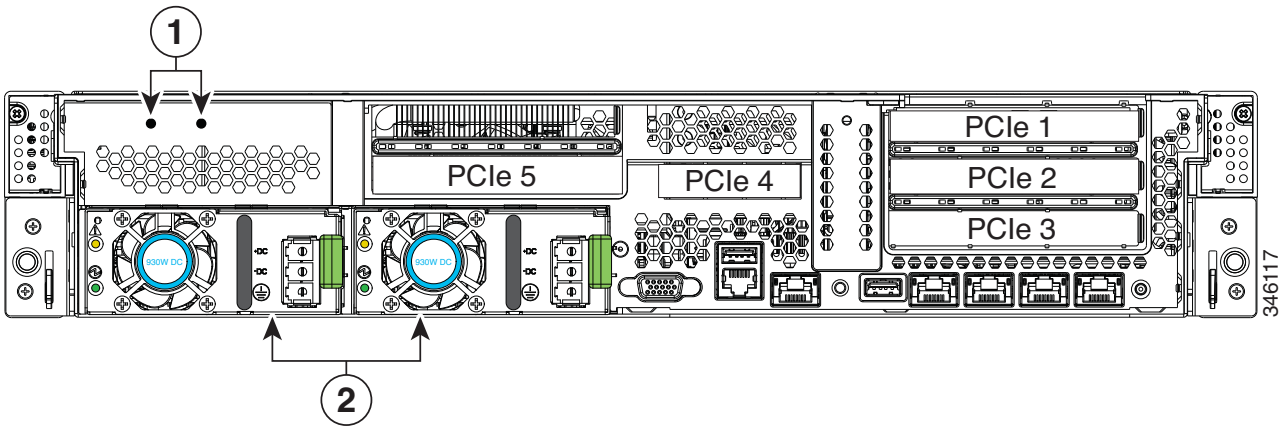
The power supply product IDs (PIDs) are as follows:

- 930 W DC power supply PID is UCSC-PSU-930WDC
- 650 W AC power supply PID is UCSC-PSU-650W

Because the AC power supplies are described in the existing C240 M3 SFF server technical specification, only the DC power supplies are described in this section.

Figure 1 shows the rear of the server and the location of the DC power supplies.

Figure 1 Cisco UCS C240 M3 High-Density SFF Rack Server

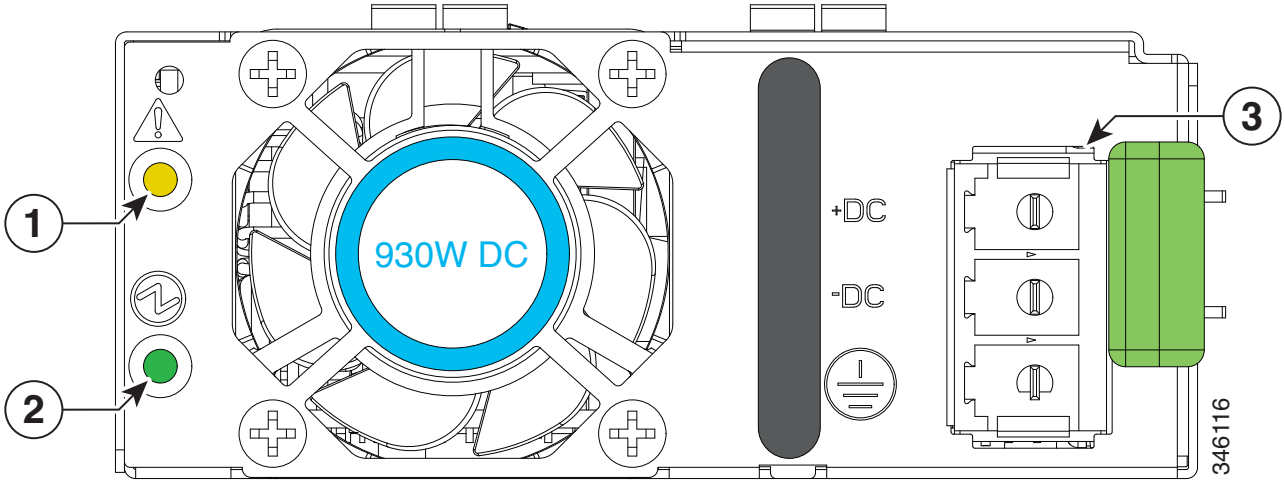


1	Screw holes for grounding lugs	**2**	DC power supplies (up to two)

The Cisco UCS C240 NEBS server uses one or two 930 W, -48 VDC power supplies (class RSP1). These power supplies are hot-swappable when there is 1+1 redundancy.

Figure 1 shows the power supply features in more detail.

Figure 2 930 W, -48 VDC Power Supply (rear view)



1	Power supply fault LED	**3**	DC power input connector
2	Power supply status LED	**—**	—

Table 1 Power Supply LED State Definitions

LED Name	LED State and Definition
Power supply fault	■ 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).
Power supply status	■ Off—There is no DC power to the power supply. ■ Green, blinking—DC power OK, DC output not enabled. ■ Green, solid—DC power OK, DC outputs OK.

Table 2 lists the specifications for each 930 W, -48 VDC power supply (Cisco PID UCSC-PSU-930WDC).

Table 2 Power Supply Specifications

Parameter	Description
Class	■ RSP1
Input	
DC input voltage range	■ 40 to 72 VDC (self-ranging, 48 to 60 VDC nominal)
DC line input current (steady state)	■ 23 A peak at 48 VDC
Output	
12 V main power output	■ 930 W
12 V standby power output	■ 30 W
Power supply output voltage	■ Main power: 12 VDC ■ Standby power: 12 VDC
Rated output load	■ 2.5 A minimum (within 40 - 72 VDC range)

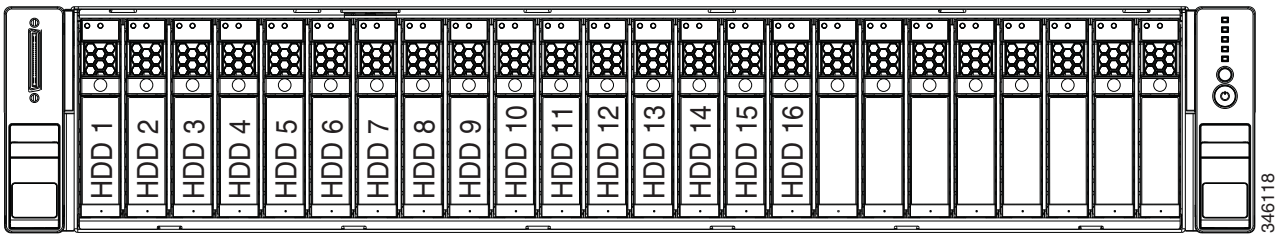
Drive Backplane

The NEBS server supports one drive backplane option: small form-factor drives with the 16-drive, direct-connect backplane (no expander). This means that the maximum number of drives is sixteen 2.5-inch hard drives or solid state drives. With the 16-drive backplane, only the first 16 drive bays are used.

This backplane has an ordering PID specific to the NEBS Server. The PID for the Cisco UCS 240 NEBS server is UCSC-C240-SNEBS.

Figure 3 shows the front view of the server with 16 drives installed.

Figure 3 Cisco UCS C240 NEBS Server (Small Form-Factor Drives, 16 HDD Backplane)



CPUs

The NEBS server supports the following CPUs:

- Intel Xeon E5-2658 (PID UCS-CPU-E5-2658)
- Intel Xeon E5-2620 (PID UCS-CPU-E5-2620)

Memory

The NEBS server supports the following DIMMs:

- Up to twenty-four 4, 8, or 16 GB 1600-MHz RDIMMs, as follows
  - 4 GB DIMMs (PID UCS-MR-1X041RY-A)
  - 8 GB DIMMs (PID UCS-MR-1X082RY-A)
  - 16 GB DIMMS (PID UCS-MR-1X162RY-A)

RAID Controller

The NEBS server supports the following RAID controller:

- LSI MegaRAID 9266CV-8i (PID UCS-RAID-9266CV)

Hard Disk Drives

The NEBS server supports the following hard disk drives:

- Up to sixteen 300 GB 15K RPM SAS drives (4.8 TB maximum total capacity)
- Up to sixteen 200 GB SSD drives (3.2 TB maximum total capacity)

Network Cards

The NEBS server supports the following PCIe network cards:

- Cisco VIC 1225 Dual Port 10Gb SFP+ CNA (PID UCSC-PCIE-CSC-02)
- Emulex LPe 12002 Dual Port 8Gb Fibre Channel HBA (PID N2XX-AEPCI05)
- QLogic QLE2562 Dual Port 8Gb Fibre Channel HBA (PID N2XX-AQPCI05)
- Intel i350 Quad Port 1Gb Adapter (PID UCSC-PCIE-IRJ45)
- Broadcom 5709 Dual Port 1Gb w/TOE iSCSI for M3 Servers (PID N2XX-ABPCI01-M3)
- Intel X540 Dual Port 10GBaseT (PID UCSC-PCIE-ITG)

NOTE: For more details on CPUs, memory, RAID controllers, hard disk drives, or network cards, see the Cisco UCS C240 M3 SFF technical specification, found at the following link:

http://www.cisco.com/en/US/prod/collateral/ps10265/ps10493/C240M3_SFF_SpecSheet.pdf

Related Documentation

For additional information, see the following documents:

- Cisco UCS C240 Server Installation and Service Guide at:

http://www.cisco.com/en/US/docs/unified_computing/ucs/c/hw/C240/install/C240.pdf

- Cisco UCS C240 M3 SFF Spec Sheet at:

http://www.cisco.com/en/US/prod/collateral/ps10265/ps10493/C240M3_SFF_SpecSheet.pdf

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