

Cisco UCS C240 M5 Rack Server

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The Cisco UCS® C240 M5 Rack Server delivers industry-leading performance and expandability.

Product overview

The Cisco UCS C240 M5 Rack Server is a 2-socket, 2-Rack-Unit (2RU) rack server offering industry-leading performance and expandability. It supports a wide range of storage and I/O-intensive infrastructure workloads, from big data and analytics to collaboration. Cisco UCS C-Series Rack Servers can be deployed as standalone servers or as part of a Cisco Unified Computing System™ (Cisco UCS) managed environment to take advantage of Cisco's standards-based unified computing innovations that help reduce customers' Total Cost of Ownership (TCO) and increase their business agility.

In response to ever-increasing computing and data-intensive real-time workloads, the enterprise-class Cisco UCS C240 M5 server extends the capabilities of the Cisco UCS portfolio in a 2RU form factor. It incorporates the Intel® Xeon® Scalable processors, supporting up to 20 percent more cores per socket, twice the memory capacity, and five times more.

Non-Volatile Memory Express (NVMe) PCI Express (PCIe) Solid-State Disks (SSDs) compared to the previous generation of servers. These improvements deliver significant performance and efficiency gains that will improve your application performance. The C240 M5 delivers outstanding levels of storage expandability with exceptional performance, with:

The latest second-generation Intel Xeon Scalable CPUs, with up to 28 cores per socket

- Supports the first-generation Intel Xeon Scalable CPU, with up to 28 cores per socket
- Support for the Intel Optane DC Persistent Memory (128G, 256G, 512G)¹
- Up to 24 DDR4 DIMMs for improved performance including higher density DDR4 DIMMs
- Up to 26 hot-swappable Small-Form-Factor (SFF) 2.5-inch drives, including 2 rear hot-swappable SFF drives (up to 10 support NVMe PCIe SSDs on the NVMe-optimized chassis version), or 12 Large-Form-Factor (LFF) 3.5-inch drives plus 2 rear hot-swappable SFF drives
- Support for 12-Gbps SAS modular RAID controller in a dedicated slot, leaving the remaining PCIe Generation 3.0 slots available for other expansion cards

¹ Requires a DDR4 DIMM for deployment. The sizes of DCPMM must be the same and the DDR4 DIMMS must be the same. But between the DCPMM and DIMMs, the sizes may vary, as shown in the 18-TB configuration described earlier in this data sheet.

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- Modular LAN-On-Motherboard (mLOM) slot that can be used to install a Cisco UCS Virtual Interface Card (VIC) without consuming a PCIe slot, supporting dual 10- or 40-Gbps network connectivity
 - Dual embedded Intel x550 10GBASE-T LAN-On-Motherboard (LOM) ports
 - Modular M.2 or Secure Digital (SD) cards that can be used for boot

High performance for data-intensive applications

The Cisco UCS C240 M5 rack server is well-suited for a wide range of enterprise workloads, including:

- Big data and analytics
- Collaboration
- Small and medium-sized business databases
- Virtualization and consolidation
- Storage servers
- High-performance appliances

C240 M5 servers can be deployed as standalone servers or in a Cisco UCS managed environment. When used in combination with Cisco UCS Manager, the C240 M5 brings the power and automation of unified computing to enterprise applications, including Cisco® SingleConnect technology, drastically reducing switching and cabling requirements.

Cisco UCS Manager uses service profiles, templates, and policy-based management to enable rapid deployment and help ensure deployment consistency. It also enables end-to-end server visibility, management, and control in both virtualized and bare-metal environments.

The Cisco Integrated Management Controller (IMC) delivers comprehensive out-of-band server management with support for many industry standards, including:

- Redfish Version 1.01 (v1.01)
- Intelligent Platform Management Interface (IPMI) v2.0
- Simple Network Management Protocol (SNMP) v2 and v3
- Syslog
- Simple Mail Transfer Protocol (SMTP)
- Key Management Interoperability Protocol (KMIP)
- HTML5 GUI
- HTML5 virtual Keyboard, Video, and Mouse (vKVM)
- Command-Line Interface (CLI)
- XML API

Management Software Development Kits (SDKs) and DevOps integrations exist for Python, Microsoft PowerShell, Ansible, Puppet, Chef, and more. For more information about integrations, see Cisco DevNet (<https://developer.cisco.com/site/ucs-dev-center/>).

The C240 M5 is Cisco Intersight™ ready. Cisco Intersight is a new cloud-based management platform that uses analytics to deliver proactive automation and support. By combining intelligence with automated actions, you can reduce costs dramatically and resolve issues more quickly.

Product specifications

Table 1 lists the specifications for the Cisco UCS C240 M5 Rack Server.

Table 1. Specifications

Item	Specifications
Form factor	2RU rack server
Processors	Intel® Xeon® Scalable processors (1 or 2) or second-generation Intel Xeon Scalable processors
Memory	24 DDR4 DIMM slots: 8, 16, 32, 64, and 128 GB and up to 2666 MHz Support for the Intel Optane DC Persistent Memory (128G, 256G, 512G)
PCIe expansion	6 PCIe 3.0 slots plus 1 dedicated 12-Gbps RAID controller slot and 1 dedicated mLOM slot
RAID controllers	<ul style="list-style-type: none"> Internal controllers: Cisco 12-Gbps Modular RAID Controller (PCIe 3.0) with 2- or 4-GB Flash-Backed Write Cache (FBWC), providing enterprise-class data protection for up to 26 SAS and SATA Hard Disk Drives (HDDs), SSDs, or NVMe PCIe SSDs; or Cisco 12-Gbps Modular SAS Host Bus Adapter (HBA) External controller: Cisco 12-Gbps 9400-8e SAS HBA
Internal storage	Backplane options: <ul style="list-style-type: none"> Up to 26 x 2.5-inch SAS and SATA HDDs and SSDs and up to 4 NVMe PCIe drives Up to 10 x 2.5-inch NVMe PCIe and 16 SAS and SATA HDDs and SSDs Up to 12 x 3.5-inch SAS and SATA HDDs and SSDs, and 2 rear 2.5-inch HDDs and SSDs and up to 4 NVMe PCIe drives
Embedded Network Interface Cards (NICs)	Dual 10GBASE-T Intel x550 Ethernet ports
mLOM	Dedicated mLOM slot that can flexibly accommodate 1-, 10-, 25-, 40-, and 100-Gbps adapters
Power supplies	Hot-pluggable, redundant 770W AC, 1050W AC, 1050W DC, and 1600W AC
Other storage	<ul style="list-style-type: none"> Dual internal Cisco FlexFlash SD cards (32, 64, and 128 GB) for installing an operating system or hypervisor Support for RAID 0 mirroring between SD cards Dedicated Baseboard Management Controller (BMC) MicroSD card (32 GB) for server utilities Dual M.2 SATA SSD or NVMe
Management	<ul style="list-style-type: none"> Cisco® Intersight™ Cisco Integrated Management Controller (IMC) Cisco Integrated Management Controller (IMC) Supervisor Cisco UCS Manager Cisco UCS Central Software Cisco UCS Director Cisco UCS Performance Manager

Item	Specifications
Rack options	Cisco ball-bearing rail kit with optional reversible cable management farm
Hardware and software interoperability	See the Cisco Hardware and Software Interoperability List for a complete listing of supported operating systems and peripheral options.

System requirements

Table 2 lists system requirements for the server.

Table 2. System Requirements

Item	Requirements
Cisco UCS Manager (optional)	Release 3.2(1) or later
Cisco IMC	Release 3.1(1) or later

Ordering information

For information about installing or upgrading your server, see the [Cisco UCS C240 M5 Rack Server hardware installation guide](#).

For ordering information, see:

- [Cisco UCS C240 M5 SFF rack server specifications sheet](#)
- [Cisco UCS C240 M5 LFF rack server specifications sheet](#)

Warranty information

Cisco UCS C240 M5 Rack Servers have a 3-year Next-Business-Day (NBD) hardware warranty and 90-day software warranty.

Augmenting the Cisco UCS warranty, Cisco Smart Net Total Care™ and Cisco Solution Support services are part of Cisco's technical services portfolio. Cisco Smart Net Total Care combines Cisco's industry-leading and award-winning foundational technical services with an extra level of actionable business intelligence that is delivered to you through the smart capabilities in the Cisco Smart Net Total Care portal. For more information, please refer to <https://www.cisco.com/c/en/us/support/services/smart-net-total-care/index.html>.

Solution Support includes both Cisco product support and solution-level support, resolving complex issues in multivendor environments on average 43 percent more quickly than with product support alone. Solution Support is a critical element in data center administration, helping rapidly resolve any issue encountered while maintaining performance, reliability, and return on investment.

This service centralizes support across your multivendor Cisco environment for both our products and solution partner products you've deployed in your ecosystem. Whether there is an issue with a Cisco or solution partner product, just call us. Our experts are the primary point of contact and own the case from first call to resolution. For more information, please refer to <https://www.cisco.com/c/en/us/services/technical/solution-support.html>.

Product environmental information

Product environmental information for users per Commission Regulation (EU) 2019/424

<https://www.cisco.com/web/dofc/18799430.pdf>

Cisco Customer Recycling Solutions

<https://www.cisco.com/c/en/us/about/product-innovation-stewardship/product-recycling/takeback-recycle-program.html>

Cisco and Partner Services

Cisco and our industry-leading partners deliver services that accelerate your transition to a Cisco UCS C-Series Rack Servers solution. Cisco Unified Computing Services can help you create an agile infrastructure, accelerate time to value, reduce costs and risks, and maintain availability during deployment and migration. After deployment, our services can help you improve performance, availability, and resiliency as your business needs evolve and help you further mitigate risk. For more information, visit

<https://www.cisco.com/go/unifiedcomputingservices>.

Cisco Capital

Flexible payment solutions to help you achieve your objectives

Cisco Capital makes it easier to get the right technology to achieve your objectives, enable business transformation and help you stay competitive. We can help you reduce the total cost of ownership, conserve capital, and accelerate growth. In more than 100 countries, our flexible payment solutions can help you acquire hardware, software, services and complementary third-party equipment in easy, predictable payments. [Learn more](#).

For more information

For more information about Cisco UCS servers, refer to <https://www.cisco.com/go/ucs>.

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