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Data Sheet

# Cisco UCS B200 M5 Blade Server

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For remote sites or data centers, the enterprise-class Cisco UCS B200 M5 Blade Server delivers market-leading performance, versatility, and density without compromise for workloads ranging from web infrastructure to distributed databases.

#### **Product Overview**

The Cisco UCS B200 M5 Blade Server delivers performance, flexibility, and optimization for deployments in data centers, in the cloud, and at remote sites. This enterprise-class server offers market-leading performance, versatility, and density without compromise for workloads, including Virtual Desktop Infrastructure (VDI), web infrastructure, distributed databases, converged infrastructure, and enterprise applications such as Oracle and SAP HANA. The B200 M5 server can quickly deploy stateless physical and virtual workloads through programmable, easy-to-use Cisco UCS Manager and Cisco Intersight and simplified server access through Cisco SingleConnect technology. It includes:

- 2<sup>nd</sup> Gen Intel<sup>®</sup> Xeon<sup>®</sup> Scalable and Intel Xeon Scalable processors with up to 28 cores per socket
- Up to 24 DDR4 DIMMs for improved performance with up to 12 DIMM slots ready for Intel Optane <sup>™</sup> DC Persistent Memory
- Up to 2 GPUs
- Up to 2 Small Form-Factor (SFF) drives
- Up to 2 SD cards or M.2 SATA drives
- Up to 80 Gbps of I/O throughput

#### Main Features

The Cisco UCS B200 M5 server is a half-width blade. Up to eight servers can reside in the 6-Rack-Unit (6RU) Cisco UCS 5108 Blade Server Chassis, offering one of the highest densities of servers per rack unit of blade chassis in the industry. You can configure the B200 M5 to meet your local storage requirements without having to buy, power, and cool components that you do not need.

The Cisco UCS B200 M5 provides these main features:

- Up to two 2 nd Gen Intel Xeon Scalable and Intel Xeon Scalable processors with up to 28 cores per CPU
- 24 DIMM slots for industry-standard DDR4 memory at speeds up to 2933 MHz, with up to 3 TB of total memory when using 128-GB DIMMs. Up to 12 DIMM slots ready for Intel Optane DC Persistent Memory to accommodate up to 6 TB of Intel Optane DC Persistent Memory
- Modular LAN on Motherboard (mLOM) card with Cisco UCS Virtual Interface Card (VIC) 1440 or 1340, a 2-port, 40-gigabit Ethernet (GE), Fibre Channel over Ethernet (FCoE)—capable mLOM mezzanine adapter

- Optional rear mezzanine VIC with two 40-Gbps unified I/O ports or two sets of 4 x10-Gbps unified I/O ports, delivering 80 Gbps to the server; adapts to either 10- or 40-Gbps fabric connections
- Two optional, hot-pluggable, Hard Disk Drives (HDDs), Solid-State Drives (SSDs), or Nonvolatile Memory Express (NVMe) 2.5-inch drives with a choice of enterprise-class Redundant Array of Independent Disks (RAID) or pass-through controllers
- Support for Optional SD Card or M.2 SATA drives for flexible boot and local storage capabilities
- Support for up to 2 optional GPUs
- Support for one rear storage mezzanine card
- Support for one 16-GB internal flash USB drive

## **Product specifications**

Table 1 lists the specifications for the Cisco UCS B200 M5 Blade Server.

Table 1. Specifications

ltem	Specifications
Processors	Up to 2 Intel Xeon Scalable processors (1 or 2)
Memory	24 DDR4 DIMM slots: 16, 32, 64, and 128 GB at up to 2933 MHz
Intel Optane DC Persistent Memory	12 DIMM slots: 128, 256, and 512 GB at up to 2666 MHz
mLOM	mLOM slot for Cisco UCS VIC 1440 or 1340
Mezzanine adapter (rear)	<ul> <li>1 rear mezzanine adapter for:</li> <li>Cisco UCS VIC 1480 or 1380 mezzanine card</li> <li>Cisco port expander mezzanine card</li> <li>Cisco nVIDIA P6 GPU rear mezzanine card</li> <li>Cisco blade NVMe storage card</li> </ul>
Mezzanine adapter (front)	<ul> <li>1 front mezzanine adapter for:</li> <li>Cisco FlexStorage 12-Gbps SAS RAID Controller</li> <li>Cisco FlexStorage 12-Gbps SAS RAID Controller with 2-GB cache</li> <li>Cisco FlexStorage NVMe or pass-through module</li> <li>Cisco nVIDIA P6 GPU front mezzanine card</li> </ul>

ltem	Specifications
Internal storage	<ul> <li>2 hot-pluggable front-access 2.5-inch drives:</li> <li>HDD: 10,000 or 15,000 RPM with up to 1.8 TB per drive</li> <li>SSD: Enterprise Performance and Value SSDs with up to 7.6 TB per drive</li> <li>NVMe: Up to 7.7 TB per drive</li> <li>Note: Drives require a RAID or pass-through controller in the front mezzanine adapter slot.</li> <li>Choice of either:</li> <li>2 internal SD cards (32-,64-, or 128-GB with boot-mirroring or</li> <li>Up to 2 M.2 SATA drives (240 or 960 GB) supported via LSI software RAID</li> </ul>
Management	Cisco Intersight software Cisco UCS Manager Release 4.0(4) Cisco UCS Central Software Cisco UCS Director Cisco UCS Performance Manager
Temperature: operating	50° to 95°F (10° to 35°C)
Temperature: nonoperating:	-40° to 149°F (–40° to 65°C)
Humidity: operating	5% to 93% noncondensing
Humidity: nonoperating	5% to 93% noncondensing
Altitude: operating	o to 10,000 ft (o to 3000m); maximum ambient temperature decreases by 1°C per 300m
Altitude: nonoperating	40,000 ft (12,000m)

## System Requirements

Table 2 lists system requirements for the server.

 Table 2.
 System requirements

ltem	Requirements
Blade chassis	Cisco UCS 5108 Blade Server Chassis
Fabric interconnect	Cisco UCS 6248 UP, 6296UP, 6332- 16UP, 6332, 6324, and 6454 Fabric Interconnects
Fabric extender	Cisco UCS 2204, 2208, 2304 Fabric Extenders
Cisco UCS Manager software	Current: Release 4.0(4) or later; refer to the UCSM Release Notes for supported releases for this platform.

## **Ordering Information**

Table 3 provides ordering information for the Cisco UCS B200 M5.

Table 3. Ordering information

Part number	Description
UCSB-B200-M5	Cisco UCS B200 M5 Blade w/o CPU, memory, HDD, mezzanine
UCSB-B200-M5-U	Cisco UCS B200 M5 Blade w/o CPU, memory, HDD, mezzanine (UPG)
UCSB-B200-M5-CH	DISTI: Cisco UCS B200 M5 w/o CPU, memory, drive bays, HDD, mezzanine

For information about installing or upgrading your server, see the <u>Cisco UCS B200 M5 hardware installation guide</u>.

For ordering information, see the <u>Cisco UCS B200 M5 Blade Server specification sheet</u>.

## Warranty Information

Cisco UCS B200 M5 Blade Servers have a 3-year Next-Business-Day (NBD) hardware warranty and 90-day software warranty.

Augmenting the Cisco Unified Computing System<sup>™</sup> (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 <a href="https://www.cisco.com/c/en/us/support/services/smart-net-total-care/index.html">https://www.cisco.com/c/en/us/support/services/smart-net-total-care/index.html</a>.

Cisco 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. Cisco 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 that you have deployed in your ecosystem. Whether there is an issue with a Cisco product or with a 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 <a href="https://www.cisco.com/c/en/us/services/technical/solution-support.html">https://www.cisco.com/c/en/us/services/technical/solution-support.html</a>.

## Takeback and Recycle Program

For more information, please refer to <a href="https://www.cisco.com/c/en/us/about/product-innovation-stewardship/product-recycling/takeback-recycle-program.html">https://www.cisco.com/c/en/us/about/product-innovation-stewardship/product-recycling/takeback-recycle-program.html</a>.

#### Cisco and Partner Services

Cisco and our industry-leading partners deliver services that accelerate your transition to a Cisco UCS B-Series Blade 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 <a href="https://www.cisco.com/go/unifiedcomputingservices">https://www.cisco.com/go/unifiedcomputingservices</a>.

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