Data sheet Cisco public



Cisco UCS C845A M8 Rack Server

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The Cisco UCS C845A M8 Rack Server is a highly scalable, flexible, and customizable Al system based on the NVIDIA MGX reference design for accelerated computing. With support for two to eight NVIDIA PCIe GPUs and NVIDIA AI Enterprise software, it delivers high performance for a wide range of AI workloads – including Generative AI fine-tuning and inference.

Product overview

Built on the NVIDIA MGX modular reference design, the Cisco UCS C845A M8 Rack Server is a flexible, scalable, and customizable AI system capable of growing as your AI needs grow. Configure with 2, 4, 6, or 8 PCIe GPUs to address a multitude of workloads ranging from generative AI, graphics and rendering, to virtual desktop infrastructure.



UCS C845A M8 servers can be configured with two to eight NVIDIA GPUs. Depending on the configuration, customers can choose between the PCle-based NVIDIA H100 NVL, H200 NVL, or L40S GPU. Thanks to the sophistication of the MGX design, other next-generation NVIDIA GPUs are planned to be introduced on this same platform as these GPUs become available.

With a compute node powered by AMD's new high-end Turin (5th Gen) CPUs, designed specifically for AI workloads, the UCS C845A M8 provides a no-compromise solution for CPU or GPU performance required to avoid bottlenecks within an AI server. Another benefit is the ability to configure the server with the NVIDIA ConnectX-7 NIC and/or NVIDIA BlueField-3 DPUs to handle data traffic in and out of the server.

Systems equipped with NVIDIA H100 NVL or H200 NVL GPU come with a five-year license for NVIDIA AI Enterprise, a cloud-native software platform that streamlines development and deployment of production-grade AI solutions, including AI agents, generative AI, computer vision, speech AI, and more. Easy-to-use microservices optimize model performance with enterprise-grade security, support, and stability, ensuring a smooth transition from prototype to production for enterprises that run their businesses on AI.

Using Cisco Intersight®, customers can see, control, and automate their compute, storage, and networking infrastructure, wherever it is, from one place just as they can do today with their other Cisco UCS® blade or rack servers.

Features and benefits

Table 1. Summary of features and benefits of the Cisco UCS C845A M8 Rack Server

Feature	Benefit
Scalable and flexible	 Rapid deployment of Al and accelerated computing technologies Perfectly suited for any data -center environment
Built on NVIDIA MGX design	 Modular and future-ready design that can adapt to evolving technology needs Next-generation GPUs can be integrated without purchasing a new platform
Dense design	• Drive 8x NVIDIA GPUs, 2x AMD Turin CPUs, and 5x PCIe slots in a 4RU chassis
Cisco Intersight support	 See, control, and automate your compute, storage, and networking infrastructure throughout its lifecycle
E1.S drives for local storage	 Increased storage density, improved thermal management, and hot-swappable drives High performance, lower power consumption, and compact form factor
Addition to NVIDIA MGX reference design	Improved power delivery, fewer PCBs, and improved cable routing

Product specifications

 Table 2.
 Specifications of the Cisco UCS C845A M8 Rack Server

Item	Specifications
Form factor	4RU Air-cooled rack server
Processors	2x 5th Gen AMD EPYC 9475F 48 cores, 3.65GHz (max boost 4.8 GHz) or 2x 5th Gen AMD EPYC 9655 96 cores, 2.6GHz (max boost 4.5 GHz) or 2x 5th Gen AMD EPYC 9575F 64 cores, 3.3GHz (max boost 5 GHz)
Memory	8x 64GB DDR5 up to 5,200 MT/s RDIMMs @1DPC or 16x 64GB DDR5 up to 5,200 MT/s RDIMMs @1DPC or 16x 96GB DDR5 up to 5,200 MT/s RDIMMs @1DPC or 32x 64GB DDR5 up to 4,400 MT/s RDIMMs or 32x 96GB DDR5 up to 4,400 MT/s RDIMMs
GPUs	Up to 8x NVIDIA H200 NVL or Up to 8x NVIDIA H100 NVL or Up to 8x NVIDIA L40S
Boot drives	2x 960GB M.2 SATA SSDs (includes hardware RAID)
Internal storage	Up to 20x E1.S NVMe PCle drives

Item	Specifications
PCIe slots	1x PCle Gen5x16 FHHL for north-south traffic - NVIDIA ConnectX-7 (1x400G, 2x200G), NVIDIA BlueFiled-3 B3220 DPU, NVIDIA BlueField-3 3240 (double slot) 4x PCle Gen5x16 FHHL for east-west traffic - NVIDIA ConnectX-7 or NVIDIA BlueField-3 3140H SuperNIC
OCP 3.0 slot	Intel® X710-DA2 (dual-port 10GBaseT) for x86 management
Power supply	4x 3.2kW 80Plus 12V M-CRPS hot-swappable redundant PSUs with N+1 Redundancy
Management	Cisco Intersight
Hardware and software interoperability	See the Cisco <u>Hardware and Software Interoperability</u> lists for a complete listing of supported operating systems and peripheral options

Ordering information

This information will be provided in the second quarter of 2025 when the UCS C845A M8 will be orderable.

Warranty information

Cisco UCS C845A M8 Rack Servers have a three-year Next-Business-Day (NBD) hardware warranty and a 90-day software warranty.

Product sustainability

Information about Cisco's Environmental, Social, and Governance (ESG) initiatives and performance is provided in Cisco's CSR and sustainability <u>reporting</u>.

 Table 3.
 Cisco environmental sustainability information

Sustainability topic		Reference
General	Information on product-material-content laws and regulations	<u>Materials</u>
	Information on electronic waste laws and regulations, including our products, batteries, and packaging	WEEE Compliance
	Information on product takeback and reuse program	Cisco Takeback and Reuse Program
	Sustainability inquiries	Contact: csr_inquiries@cisco.com
Material	Product packaging weight and materials	Contact: environment@cisco.com

Cisco and partner services

Cisco and our industry-leading partners deliver services that accelerate your transition to Cisco UCS solutions for AI and High-Performance Computing (HPC). 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.

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Printed in USA C78-4905401-00 01/25