Cisco UCS XE9305 Chassis

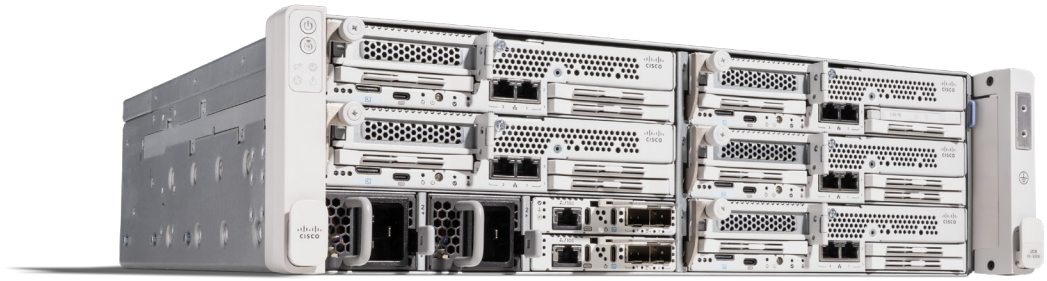
Contents

Overview

Cisco Unified Edge brings together compute, storage, routing, switching, and security into a single configurable solution to help IT organizations simplify the deployment, operations, and lifecycle management of edge infrastructure at global scale. Cisco Unified Edge is a fully integrated, edge-optimized, AI-ready, and SaaS-managed platform, engineered to deliver a superior user experience with unprecedented visibility, consistency, and control for a host of edge use cases.

The foundation of Cisco Unified Edge is the Cisco UCS XE9305 modular system. A 3 RU, short-depth, multi-mountable chassis, the Cisco UCS XE9305 provides five front-facing slots that can accommodate sled-like nodes that are easy to service and adaptable to deliver a range of capabilities, from computing to storage and networking to security. The Cisco UCS XE9305 is designed to operate in an extended range of temperatures (5 to 45oC) while maintaining a quiet noise level (40s dBA with 20% load in 25oC), and is protected by an optional locking bezel with a separately replaceable air filter, allowing deployments in a wide range of physical spaces.

High-bandwidth inter-node connectivity is achieved through active-active 25 Gbps switches embedded on the Cisco UCS Edge Chassis Management Controllers, overcoming the lack of bandwidth common to many edge locations and simplifying a key requirement for distributed computing environments running virtualized, containerized, or AI workloads. Managed by the Cisco Intersight™ cloud operations platform, IT teams can scale deployments on Cisco Unified Edge to thousands of locations and shift focus from administrative tasks to business outcomes, leveraging edge-optimized infrastructure management capabilities such as fleet management, full-stack solution blueprints, and zero-touch provisioning.



Platform highlights

Simplify edge infrastructure and operations

- Modular edge-optimized solution, combining compute, storage, networking, and security into a single platform, significantly reducing complexity for IT teams. By integrating all these components, edge IT teams can streamline deployment and simplify infrastructure management.
- Zero-touch deployment, eliminating the need for skilled IT staff to be physically present at the edge with easy serviceability and remote deployment, and enabling IT teams to efficiently roll out new services and updates while reducing costly truck rolls.
- Centralized management, providing global consistency, repeatability, and control, and enabling the deployment of fleet blueprints, full-stack plug-and-play policies and settings at scale, leading to uniformity and ease of management across highly distributed edge locations.
- End-to-end visualization, offering global fleet visualization and cross-domain context visibility, improving operations for both server and network teams. This comprehensive view allows IT teams to monitor and manage their entire edge infrastructure effectively, enhancing operational efficiency and coordination across various domains.

Unify edge systems

- Unifying edge systems, by bringing together key technologies to meet the distinctive needs of edge environments, while assuring security, manageability, and performance.
- Unified platform, a modular, edge-optimized, AI-ready, and SaaS-managed platform integrating compute, network, storage, and security so IT teams can streamline deployment and simplify lifecycle management.
- Optimized for edge environments, meeting unique edge requirements for power, cooling, acoustics, and space while supporting workloads of today and tomorrow.
- Integrated protection, extending advanced compute and networking platform-level physical and digital security across the entire system to protect edge operations. SaaS management platforms ensure that users are verified and authenticated before granting access, minimizing risks and protecting sensitive data.
- Streamline lifecycle management, reusing chassis power and cooling infrastructure across multiple generations or types of nodes, enhancing longevity, sustainability, and serviceability. The modular architecture lets organizations adopt technologies at their pace, simplifying lifecycle management with less risk.

Redefine edge solutions

- Redefining edge solutions for AI era, by integrating smoothly with existing edge environments, while delivering the accelerated performance required for AI applications. Cisco Unified Edge acts as a springboard to help organizations unlock new levels of data-powered efficiency and innovation.
- AI-ready system, with support for advanced processors and accelerators, helping ensure that IT teams can efficiently run evolving workload demands without compromising on performance or efficiency.
- Ecosystem integration, offering a choice of infrastructure software, such as Nutanix, Red Hat, VMware, and SUSE, provides flexibility to address any use case. This integration capability allows IT teams to tailor solutions to specific needs, for compatibility and optimized performance.
- Validated edge solutions, offering tested and certified solutions for vertical-specific use cases, ensuring reliability. IT teams can deploy with confidence, knowing that the solutions are tailored to meet the unique challenges of their specific industry.
- Continuous SaaS enhancements, offering advanced end-to-end visibility and remediation capabilities, allows IT teams to quickly identify and resolve issues, maintaining system integrity and performance over time.

Key features and benefits

Five Slots	3 RU-high, 17-inch-wide, and 18-inch-deep chassis with five front-facing flexible slots for compute nodes and future modules that may include networking node for routing, switching, and secure access service edge (SASE) capabilities.

Hot Swappable Controllers	Two (2) hot-swappable Cisco Edge Chassis Management Controllers (CMCs) forming a unified fabric that provides connectivity between all nodes within the chassis and with upstream networks, and provides local chassis management and secure control plane connection with Cisco Intersight. Each CMC features: • An embedded 25 Gbps switch with 145 Gbps of switching bandwidth with five (5) rear-facing 25 Gbps switch ports connecting to nodes within the chassis through the chassis mid-plane and two (2) front-panel 10 Gbps SFP+ uplink ports for data traffic • One (1) front-panel 1 Gbps RJ-45 uplink port for management traffic • Two (2) front-panel USB-C ports for management console and external storage connectivity
Two Power Supplies	Two (2) hot-swappable 2400 W Titanium AC power supply units (PSUs) providing N+N redundancy, removable from the front for service via latching mechanism without special tooling.
Acoustically Optimized Fans	Five (5) 80 mm hot-swappable fan modules with acoustically optimizing cooling controls, removable from both the top and the rear for service via latching mechanism without special tooling.
Locking Bezel	One (1) optional locking bezel with separately replaceable air filter covering the entire front of the server, providing protection against physical tampering and filtration against ambient particulate matter.
NFC Identifier	Near field communication (NFC) capability embedded in the chassis to aid chassis identification, claiming, and troubleshooting when used in conjunction with the Cisco Intersight app.
Multiple Mounting Options	Accessories for flexible server mounting options: sliding rail kit for 4-post racks, static mount kit for 2-post racks, brackets for wall mounting, and brackets for shelf mounting (horizontally or vertically positioned).

Models and specifications

Table 1. Product specifications

Item	Specifications
Width	5.12 in (13 cm); 3 RU
Memory	17.32 in (44 cm)
Depth	Server only: 18 in (45.7 cm) Server with security bezel or air filter: 23 in (58.4 cm)
Node slots	Five (5)
Chassis Management Controller (CMC)	Chassis Management Controller options: • Two (2) hot-swappable Cisco Edge Chassis Management Controllers

Item	Specifications	
GPU	One (1) dedicated PCIe Gen5 GPU slot for a 75-watt, HH/HL GPU, such as the NVIDIA L4	
Fan module	Five (5) 80 mm hot-swappable dual rotor fans	
Power supply bays	Two (2)	
Power supplies	2400 W Titanium certified	
	Input voltage	100 to 127 VAC 200 to 240 VAC
	Maximum input VA	3840 VA at 230 VAC
	Maximum output power per power supply	2400 W @200-240 VAC Nominal 1600 W @100-127 VAC Nominal
	Frequency	47 to 63 Hz
	Output voltage	12 V
	Power connector	IEC320 C20
Power redundancy	N+N	

Item	Specifications
Management	Cisco Intersight software (SaaS initially, Virtual Appliance and Private Virtual Appliance to follow)
Temperature: operating*	23 to 113°F (5 to 45°C) (as altitude increases, maximum temperature decreases by 1°C per 300 m)
Temperature: nonoperating*	-40 to 185°F (-40 to 85°C); maximum altitude is 40,000 ft
Humidity: operating*	5% to 85% noncondensing
Humidity: nonoperating*	5% to 93% noncondensing
Altitude: operating*	0 to 10,000 ft (0 to 3000 m); maximum ambient temperature decreases by 1°C per 300 m
Altitude: nonoperating*	40,000 ft (12,000 m)
Sound pressure level*	40s dBA – at < 20% load and at 25°C operating temperature

Table 2. Regulatory Standards Compliance: safety and EMC*

Specification	Description
Regulatory compliance	Products comply with CE Markings per directives 2004/108/EC and 2006/108/EC
Safety	• UL 60950-1 • CAN/CSA-C22.2 No. 60950-1 • EN 60950-1 • IEC 60950-1 • AS/NZS 60950-1 • GB4943
EMC: Emissions	• 47CFR Part 15 (CFR 47) Class A (FCC Class A) • AS/NZS CISPR 22 Class A • CISPR 22 Class A • EN 55022 Class A • ICES-003 Class A • VCCI Class A • EN 61000-3-2 • EN 61000-3-3 • KN22 Class A • CNS 13438 Class A

Specification	Description
EMC: Immunity	• EN 50082-1 • EN 61000-6-1 • EN 55024 • CISPR 24 • EN 300386 • KN 61000-4 Series

System Requirements

Item	Requirements
Cisco Unified Edge Chassis	Cisco UCS XE9305 Chassis
Cisco Intersight	Intersight Managed Mode

Ordering information

Part number	Description
UCSXE-M8-MLB	Cisco UCS XE9305 M8 Modular Server and Chassis MLB
UCSXE-9305-U	Cisco UCS XE9305 Chassis Configured
UCSXE-9305=	Cisco UCS XE9305 Chassis Spare

Warranty

The Cisco UCS XE9305 Chassis has a three-year next-business-day (NBD) hardware warranty and a 90-day software warranty.

Augmenting the Cisco Unified Computing System™ (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.

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 https://www.cisco.com/c/en/us/services/technical/solution-support.html.

Sustainability profile

Cisco is embedding sustainability into the product lifecycle—from manufacturing to end of use. Designed with consideration for Circular Design Principles, our products feature both individual and portfolio-wide programs and innovations, including those that address efficient architecture design, power consumption, energy management, packaging sustainability, and takeback. These elements are pivotal in reducing operational costs and advancing net-zero greenhouse gas (GHG) emissions targets, and other sustainability-related ambitions.

Information about Cisco's environmental, social, and governance (ESG) initiatives and performance is available in Cisco's Purpose Reporting Hub.

Sustainability topic		Reference
General	Information on product-material-content laws and regulations	Materials
	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 a Cisco Unified Edge solution. Cisco Unified Computing Services (UCS) 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

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