

# **Cisco UCS X-Series** Modular System





#### Overview

Tomorrow thinks differently, wanting hardware that thinks like software. The Cisco UCS X-Series with Cisco Intersight<sup>™</sup> is a modular system managed from the cloud. It is designed to be shaped to meet the needs of modern applications and improve operational efficiency, agility, and scale through an adaptable, future-ready, modular design.

The system comprises modular components that can be assembled into systems through the Cisco Intersight cloud-operations platform. Intersight brings the power of SaaS to deliver proactive monitoring, automation, and optimization of workloads across hybrid-cloud environments. Cisco UCS X-Series has won two CRN Tech Innovators awards.

The Cisco UCS X-Series provides functionalities of both blade and rack servers by offering compute density, storage capacity, and expandability in a single system, embracing a wide range of workloads in your data center.

The Cisco UCS X-Series Modular System begins with the <u>Cisco UCS X9508 Server Chassis</u> engineered to be adaptable and future-ready. The chassis has a unified Ethernet fabric with Cisco UCS Intelligent Fabric Modules and <u>Cisco</u> <u>UCS X-Fabric Technology</u> for other technologies. With the chassis' midplane-free design, either fabric can be independently upgraded. The <u>Cisco UCS X210c Compute Nodes</u> and <u>Cisco UCS X410c Compute Nodes</u> with Intel<sup>®</sup> Xeon<sup>®</sup> Scalable processors, provide the functionalities of both blade and rack servers by offering compute density, storage capacity, and expandability in a single form factor.

The <u>Cisco UCS X440p PCIe Node</u> supports adding GPUs with PCIe Gen 4.0 with the Cisco UCS X9416 X-Fabric Module. Additional nodes supporting FPGA accelerators, storage, and non-volatile memory are planned.

The Cisco UCS X-Series was designed with sustainability in mind. The UCS X-Series is equipped with modular, titanium-rated power supply units (PSUs) and a 54-volt DC-power delivery system that minimizes the many internal power conversions, internal copper cabling, and amperage - saving on both overhead and power loss. With modular, counter-rotating fans and innovative zone-based cooling to optimize only those components that need more handling, the UCS X-Series can reduce overall fan power consumption. The UCS X-Series shares many components through modularity, which allows extending life and reducing waste. All these design and operation advantages add up to enable the UCS X-Series to not only meet but exceed sustainability benchmarks such as Energy Star, EPEAT, EU regulation 2019/424, and

many others. UCS X-Series won the 2023 SEAL Sustainable Product Award.

Cisco Customer Experience (CX) Custom Quick Start Solutions help you implement your Cisco UCS X-Series technology successfully, faster and with less risk. CX experts assist with design development, validation of your deployment prerequisites, and configuration of your workloads. We also work with you to establish a system health baseline. Then, our experts train your team to use the new solution. With expertise, best practices, and insights developed from more than 35 years of leading large-scale technology implementations, you can trust us to help you get your Cisco UCS solution up and running the right way, the first time.





#### Benefits

- Adapt to any application consolidate onto a platform that combines the density and efficiency of blade servers with the expandability of rack servers
- Prepare for the future embrace new technology and cut risk with a system designed to support future technology with management delivered as SaaS
- Consolidate your older Cisco UCS<sup>®</sup> M4 servers onto the Cisco UCS X-Series, with the following improvements:
  - Reduce total power consumption by 49%
  - Reduce recurring software support costs by up to 75%
  - Reduce hardware operating costs by 90%
  - Reduce hardware maintenance costs by 72%

## Learn more

For more information about Cisco UCS X-Series, refer to the <u>Cisco UCS X-Series</u> Solution Overview or go to <u>https://cisco.</u> com/go/ucsx.

## What it offers

What the Cisco UCS X-Series Modular System provides:

- Cisco UCS X9508 Chassis
  - Seven-Rack-Unit (7RU) form factor
  - Eight front-facing flexible slots for compute nodes and PCIe nodes
  - Two Cisco UCS 9108 Intelligent Fabric Modules (IFMs) for unified Ethernet fabric
  - Optional Cisco UCS X-Fabric Technology with the UCS X9416 X-Fabric Module
- Cisco UCS X210c Compute Nodes
  - Up to two 3<sup>rd</sup>, 4<sup>th</sup>, or 5<sup>th</sup> Gen Intel<sup>®</sup> Xeon<sup>®</sup>
    Scalable processors
  - Up to 12 TB of memory
  - Up to two Cisco UCS Virtual Interface Cards (VICs) with secure boot technology
  - Up to six SAS/SATA/NVMe disk drives plus up to two M.2 drives
  - Up to two GPUs (up to six when used with an X440p PCIe node)

- Cisco UCS X410c Compute Nodes
  - Four 4<sup>th</sup> Gen Intel Xeon Scalable processors
  - Up to 16TB of memory
  - Up to two Cisco UCS Virtual Interface Cards (VICs) with secure boot technology
  - Up to six SAS/SATA/NVMe disk drives plus up to two M.2 drives
  - Up to four GPUs when used with the X440p PCIe node
- Cisco UCS X440p PCIe Node
  - Support for up to four GPUs
- Cisco Intersight Infrastructure Service
  - SaaS-based cloud management
- Support for UCS Manager 4.3.2 or later