

# Cisco UCS X440p PCIe Node

---

# Contents

Product overview	3
Features and benefits	4
Product specifications	4
System requirements	5
Ordering information	5
Warranty information	6
Product sustainability	7
Cisco and Partner Services	7
Cisco Capital	7
Document history	8

---

Un/Box the future with Cisco UCS® X-Series Modular System and Cisco Intersight™. Embrace an adaptable, future-ready, and cloud-operated system to simplify IT and innovate at the speed of software.



## Product overview

The Cisco UCS X-Series Modular System simplifies your data center, adapting to the unpredictable needs of modern applications while also providing for traditional scale-out and enterprise workloads. It reduces the number of server types to maintain, helping to improve operational efficiency and agility as it helps reduce complexity. Powered by the Cisco Intersight cloud-operations platform, it shifts your focus from administrative details to business outcomes—with hybrid cloud infrastructure that is assembled from the cloud, shaped to your workloads, and continuously optimized.

The Cisco UCS X-Series was engineered to be modular and flexible to offer adaptability and workload flexibility. With the introduction of PCIe Node and X-Fabric technology, X-Series now supports workloads that require GPUs. The unique architecture dramatically simplifies the addition, removal, or upgrade of GPUs to compute nodes. The Cisco UCS X440p PCIe Node allows you to add up to four GPUs to a Cisco X210c M6, X210c M7 or X410c M7 Compute Node with Cisco UCS X-Fabric Technology. Cisco UCS X-Series has no midplane; this innovative design provides fewer obstructions for better airflow. The vertically oriented X210c compute nodes and the X440p PCIe nodes connect directly to horizontally oriented X-Fabric modules. This enables seamless upgrades to future compute nodes, resource nodes, and X-Fabric modules without requiring any forklift upgrades.

## Features and benefits

### Main features

The Cisco UCS X440p PCIe Node is the first PCIe resource node to integrate into the Cisco UCS X-Series Modular System. The Cisco UCS X9508 Chassis has eight node slots, up to four of which can be X440p PCIe nodes when paired with a Cisco UCS X210c M6 Compute Node. The UCS X440p PCIe Node supports two x16 full-height, full-length dual slot PCIe cards, or four x8 full-height, full-length single slot PCIe cards and requires both UCS 9416 X-Fabric modules for PCIe connectivity. This provides up to 16 GPUs per chassis to accelerate your applications with the UCS X440p Nodes. If your application needs even more GPU acceleration, up to two additional GPUs can be added on each UCS X210c compute node.

Cisco UCS X440p supports following GPU options:

- Nvidia H100 NVL Tensor Core GPU
- Nvidia H100 Tensor Core GPU
- Nvidia L40 GPU
- Nvidia L40S GPU
- Nvidia L4 Tensor Core GPU
- Nvidia A100 Tensor Core GPU
- Nvidia A16 GPU
- Nvidia A40 GPU
- Nvidia T4 Tensor Core GPU
- Intel Data Center GPU Flex 140
- Intel Data Center GPU Flex 170

## Product specifications

**Table 1.** Product specifications

Item	Specifications
GPUs	<ul style="list-style-type: none"><li>• Nvidia H100 Tensor Core GPU (dual slot)</li><li>• Nvidia L40 GPU (dual slot)</li><li>• Nvidia L40S GPU (dual slot)</li><li>• Nvidia L4 Tensor Core GPU (single slot)</li><li>• Nvidia A100 Tensor Core GPU (dual slot)</li><li>• Nvidia A16 GPU (dual slot)</li><li>• Nvidia A40 GPU (dual slot)</li><li>• Nvidia T4 Tensor Core GPU (single slot)</li><li>• Intel Data Center GPU Flex 140 (single slot)</li><li>• Intel Data Center GPU Flex 170 (dual slot)</li></ul>

Item	Specifications
<b>Riser options</b>	<ul style="list-style-type: none"> <li>Riser A for 1x dual slot GPU per riser</li> <li>Riser B for 2x single slot GPUs per riser</li> </ul>
<b>Management</b>	<a href="#">Cisco Intersight software</a> (SaaS, virtual appliance and private virtual appliance) UCS Manager (UCSM) 4.3(4) or later
<b>Temperature: operating</b>	50° to 95° F (10° to 35° C)
<b>Temperature: nonoperating</b>	-40° to 149° F (-40° to 65° C)
<b>Humidity: operating</b>	5% to 93% noncondensing
<b>Humidity: nonoperating</b>	5% to 93% noncondensing
<b>Altitude: operating</b>	0 to 10,000 ft (0 to 3000m); maximum ambient temperature decreases by 1° C per 300m
<b>Altitude: nonoperating</b>	40,000 ft (12,000m)

## System requirements

**Table 2.** System requirements

Item	Requirements
<b>X-Series chassis</b>	Cisco UCS X9508 Chassis
<b>Fabric Interconnects</b>	Cisco UCS 6454, UCS 64108, and UCS 6536 fabric interconnects
<b>X-Fabric modules</b>	Cisco UCS X9416 X-Fabric modules for X9508 chassis
<b>Cisco Intersight</b>	Intersight Managed Mode (minimum Essentials license per server)

## Ordering information

Table 3 provides ordering information for the Cisco UCS X440p PCIe Node.

**Table 3.** Ordering information

Part number	Description
<b>UCSX-M6-MLB</b>	UCSX M6 Modular Server and CHASSIS MLB
<b>UCSX-M7-MLB</b>	UCSX M7 Modular Server and CHASSIS MLB
<b>UCSX-440P-U</b>	Cisco UCS X-Series Gen4 PCIe node within MLB
<b>UCSX-440P</b>	Cisco UCS X-Series Gen4 PCIe node within UCS X210c config
<b>UCSX-GPU-L4</b>	NVIDIA L4 Tensor Core, 70W, 24GB
<b>UCSX-GPU-L40</b>	NVIDIA L40, PASSIVE, 300W, 48GB

Part number	Description
<b>UCSX-GPU-L40S</b>	NVIDIA L40S, PASSIVE, 350W, 48GB
<b>UCSX-GPU-H100-80</b>	NVIDIA H100, PASSIVE, 350W, 80GB
<b>UCSX-GPU-H100-NVL</b>	NVIDIA H100 NVL, PASSIVE, 400W, 94GB
<b>UCSX-GPU-T4-16</b>	NVIDIA T4 PCIE 75W 16GB
<b>UCSX-GPU-A16</b>	NVIDIA A16 PCIE 250W 4X16GB
<b>UCSX-GPU-A40</b>	TESLA A40 RTX, PASSIVE, 300W, 48GB
<b>UCSX-GPU-A100-80</b>	TESLA A100, PASSIVE, 300W, 80GB
<b>UCSX-GPU-FLEX140</b>	Intel GPU Flex 140, Gen4x8, HHHL, 75W PCIe
<b>UCSX-GPU-FLEX170</b>	Intel GPU Flex 170, Gen4x16, HHFL, 150W PCIe
<b>UCSX-RIS-A-440P</b>	Riser A for 1x dual slot GPU per riser, X440p PCIe node (FHFL GPUs)
<b>UCSX-RIS-B-440P</b>	Riser B for 2x single slot GPUs per riser, X440p PCIe node (HHHL GPUs)

For information about installing or upgrading your server, see the [Hardware Installation Guide](#).

For ordering information, see the [X440p spec sheet](#).

## Warranty information

The Cisco UCS X440p PCIe Node 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>.

## Product sustainability

Information about Cisco’s Environmental, Social, and Governance (ESG) initiatives and performance is provided in Cisco’s CSR and sustainability [reporting](#).

**Table 4.** Product sustainability information

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

## Cisco and Partner Services

Cisco and our industry-leading partners deliver services that accelerate your transition to a Cisco UCS X-Series Modular System 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® financing 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](#).

## Document history

New or Revised Topic	Described In	Date
<b>Nvidia H100 NVL Tensor Core GPU</b>	<a href="#">Table 1</a>	August 2024
<b>Nvidia H100 Tensor Core GPU (dual slot)</b>	<a href="#">Table 3</a>	
<b>UCS Manager (UCSM) 4.3(4) or later</b>		
<b>Nvidia L40S GPU</b>	<a href="#">Table 1</a> , <a href="#">Table 3</a>	June 12, 2024

**Americas Headquarters**  
Cisco Systems, Inc.  
San Jose, CA

**Asia Pacific Headquarters**  
Cisco Systems (USA) Pte. Ltd.  
Singapore

**Europe Headquarters**  
Cisco Systems International BV Amsterdam,  
The Netherlands

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at <https://www.cisco.com/go/offices>.

Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, go to this URL: <https://www.cisco.com/go/trademarks>. Third-party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1110R)