



Radeus Labs AI Server

4U Multi-function Workstation



- Designed & Built in the USA
- High-power processing to train image-rich AI
- Handles up to four Neural Processing Unit (NPU) cards
- Advanced filtration protects from dust and debris and improves longevity

Are you looking to begin your search for an AI server?

Have you spent some time exploring AI and what it means and now you are ready to start your AI server search? Do you feel you are ready to take the next step but need to do it in a secure local environment? Have you already begun exploring AI with your local LLMs, LLM fine-tuning and alignment needs.

There are a multitude of choices and options available in the marketplace today. With so many choices and options available, navigating the complexity can be very challenging. Sorting through requirements for GPU RAM, Cuda cores, graphics card performance for example, can be overwhelming!

Radeus Labs excels in the design of custom server solutions and can readily help you achieve your objectives. Let our experienced Engineering team help you navigate the complexities of your AI server project.

Our experienced team can help you spec out a machine to set you up for success with your AI project, large or small. And the best part is that we will continue to be there for you as your business and project grow, providing a sustainable long term partner to help you keep your business on track! You don't need to invest hundreds of thousands of dollars to start your own AI projects. Let us help you to create scalable solutions that are secure and have the capacity for growth.

We have systems based on the NVIDIA 6000ADA, a leading technology platform. Other graphics cards are available on request.

Radeus Labs is a leader in the design, manufacture and marketing of leading-edge hardware and software solutions. Radeus products are purpose built for ease of

use, high-performance, sustainability, and exceptional product life spans.

The Radeus Labs AI Server is our latest cutting-edge, rack-mounted powerhouse. It is engineered to meet the most complex needs for organizations that are training today's most complex AI models. Designed with versatility in mind, this 4U rack mount server supports up to three GPUs for exceptional computing power.

- **Military and commercial organizations can scale their AI capabilities** without in house hardware expertise. With its robust, tool-agnostic design, the Radeus Labs AI Server is adaptable to current and future AI applications, providing a flexible foundation for growth.
- **Built for longevity and raw computing power**, the Radeus Labs AI Server includes advanced filtration to protect against dust and debris, making it suitable for controlled server environments and more challenging field applications.
- **Leveraging NVIDIA GPU cards and keeping NPU needs in mind**, the Radeus Labs AI server is built for keeping your own local LLMs, fine-tuning and aligning your own models. Cards are adaptable to customer preferences, the AI server provides the processing power required for 8, 16 or 64 GPU RAM models.
- **Its adaptability is complemented by Radeus Labs' commitment to customization**, ensuring that organizations only invest in what they need now and can scale hardware as their AI demands grow.

Consistent with Radeus Labs' legacy of delivering reliable, high-performance hardware solutions, this AI server is designed and built in the USA and backed by engineering support throughout its lifecycle. Organizations deploying the Radeus Labs AI Server benefit from a seamless blend of reliability, power, and support, enabling them to harness AI-driven insights faster and more effectively.

The Radeus Labs Advantage

- 1. Purpose-Built Technology:** Unlike standard off-the-shelf solutions, Radeus Labs provides technology tailored to specific operational needs. Our products are designed to extend the life of existing systems, reducing the need for costly full-scale computing system upgrades.
- 2. Agility & Responsiveness:** Radeus Labs designs computing systems that can be tailored to unique client requirements, offering faster and more personalized solutions than larger competitors.
- 3. Rugged Computing:** Radeus Labs computing systems include ruggedized PCs, servers, and data recorders designed for extreme conditions, such as temperature, dust, and vibration. These systems offer high performance in small form factors, making them ideal for harsh environments.
- 4. Cost-Effectiveness & Durability:** Radeus Labs computing systems are specifically designed to improve your total cost of ownership by incorporating modern components compatible with legacy systems, ensuring operational continuity and long product lifespans.
- 5. Superior Support:** Radeus Labs provides dedicated, USA-based engineering support throughout the product lifecycle, ensuring customers receive expert assistance whenever needed.
- 6. Deep Domain Expertise:** With more than two decades of experience, Radeus Labs has field-proven expertise. Our products are trusted by military, defense, aerospace, and industrial organizations for their durability, reliability, and low maintenance.
- 7. Sustainability & Efficiency:** Designed for efficiency, Radeus Labs computing systems are energy-efficient, minimizing heat output and power consumption, which is crucial for stable operations in environments with limited cooling resources.

General Specifications & Features

KEY FEATURES	
Motherboard	ASRock Rack Server Motherboard Dual Socket 5th and 4th Gen Intel Xeon (LGA 4677) C741 16 DIMM Slots 6 PCIe5.0 x16 Dual 10G Lan
RAM	DDR5 4800MT/s* ECC Registered DIMM
Hard Drive	1TB 2.5" V-NAND SSD 550MB/s Seq Read 520MB/s Seq. Write
Removable Storage	(7) 1TB 2.5" V-NAND SSD 550MB/s Seq Read 520MB/s Seq. Write
Ports	(1) UID button w/ LED; (1) VGA; (2) USB 2.0; (2) RJ45; (1) IPMI
Recordable Media	Blu-ray Burner SATA
Air Filtration	3-stage Environmental Filtration
Power Supply	950 Watt, N+1 Hot swap, Redundant, Input 100-240VAC
Rack Units	4U Custom Rack Mount Chassis
GPU	RTX 6000 Ada Graphic Card - 48 GB GDDR6
ENVIRONMENTAL TESTING	
Environmental Testing	Supports MIL-STD-810G environments
Operating Temperature	+5°C to +50°C
Storage Temperature	-40°C to +70°C
Secured Cargo	US Highway Truck Transport C17 Air Transport (Non-Operating, Procedures I Only)
PRE-INSTALLED SOFTWARE	
Hypervisor	

SPECIFICATIONS	
Case Dimensions	Height: 4U custom per EIA/ECA-310 Depth: 22"
Case Material	0.08" Aluminum
Front Panel	0.25" Thick Front Panel: 19.0" ISO Rack Finish: Wrinkle Black Powder Coat Text: White
Chemical Treatment	MIL-DLT-5541 Class 3
Cooling	Active air-cooling package
OTHER FEATURES	
Switches	6" length - Button with Amber LED 6" length - Button with Green LED 6" length - Button with Red LED
Drive Bays	(8) Front panel accessible drive bays: <i>With removable media for rapid downgrade procedure execution</i>
	Harsh environment 3-part filter
ACCESSORIES	
	(3) 10' Power Cords



Scan here to learn more
about the **4U AI Server** ▶



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