

# HPE Alletra Storage Server 4210



## What's new

- Configurable modular front storage for up to twenty direct connect EDSFF PCIe Gen5 SSDs. All-NVMe design with up to 315 GB/s bandwidth in a 1U standard form factor.
- Dual Intel® Xeon® 6 processors drive greater performance along with DDR5 memory at speeds of up to 6400 MT/s with up to 14%[1] more bandwidth for demanding data processing workloads.
- HPE Integrated Lights-Out 7 (iLO 7) server management software with streamlined manageability through a redesigned GUI, Redfish API, and increased security via patented secure enclave technology.
- Cloud operating experience built on the HPE GreenLake Cloud for simplified and automated lifecycle management including dramatically easier firmware management.
- Support for up to three single-wide (SW) GPUs to unleash AI-driven data storage server workloads.

## Overview

Are you looking for a storage server with exceptional performance and capacity to accelerate your AI-driven initiatives?

The HPE Alletra Storage Server 4210 is specifically designed for data storage-intensive workloads that require peak performance. Offering configuration flexibility that optimizes thermal efficiency, it will power your essential data-driven initiatives. From data stores for AI and real-time data analytics to distributed and NoSQL databases, performance sensitive Software-Defined Storage, and data heavy hyperconverged infrastructure, it delivers the capabilities you need at ideal economics with trusted security and a cloud operating experience. This includes the option to consume as-a-service via HPE GreenLake enabling you to transition from owning and maintaining to simply utilizing. HPE Alletra Storage Server 4000 systems provide the data infrastructure needed for every data-driven organization.

## Features

### Built for Applications that Require High-Caliber Performance

Purposely engineered to achieve maximum performance from your data storage-intensive workloads, the HPE Alletra Storage Server 4210 provides more data throughput, data processing, and data capacity in a seamless-to-deploy yet high density 1U form factor.

The configurable front storage with optional twelve, sixteen, and twenty E3.S PCIe Gen5 NVMe SSD drive bays provide the flexibility to balance data capacity, system performance, and thermal efficiency.

- Multiple HPE cooling options increase performance and energy efficiency to support sustainability initiatives.

The HPE Alletra Storage Server 4210 offers exceptional throughput with up to 150 GB/s (1200 Gbps) of network bandwidth into the system, up to 96 GT/s for data in flight through the system, and up to 315 GB/s of PCIe Gen5 bandwidth to All-NVMe SSDs.

Unlock value from your data faster with two Intel® Xeon® 6 processors totaling up to 288 cores, support for up to three GPU or FPGA accelerators capable of many trillions of operations per second, and up to 4 TB DDR5 memory at 6400 MT/s speed.

### **Next-Level End-to-End Security by Design**

The HPE Alletra Storage Server 4210 is built with end-to-end security at its core, from silicon to software and factory to cloud. Protect your customers, your organization, and your data from increasingly sophisticated and dangerous threats.

A physical bezel lock, logical Configuration Lock, Secure Boot, FIPS 140-2 Self-Encrypting Drives (SEDs), and Secure Erase that meets NIST Guidelines for Media Sanitization secure your data throughout your infrastructure lifecycle to end-of-life decommissioning.

HPE iLO 7 supports quantum-resistant (PQC) algorithms and assigns HPE Alletra Storage Server 4210 firmware with algorithms approved by CNSA 2.0 to boost resilience against potential attacks by quantum computers.

The HPE Alletra Storage Server 4210, powered by Intel® Xeon® 6 processors, adds hardware- and software-assisted security features including Intel® Software Guard Extensions (SGX) for application isolation and Trusted Domain Extensions (TDX) for VM isolation.

### **Delivered with an Automated, Intuitive Cloud Experience**

Simplify and transform your data infrastructure operations with a cloud operational experience for your HPE Alletra Storage Server 4210. Whether purchased or consumed as-a-service, you can monitor and operate through intuitive fleet management SaaS and rich REST APIs.

Rather than owning and maintaining your server-based data infrastructure, you can simply use it as-a-service via HPE GreenLake, freeing financial and people resources to focus on other critical areas of your business.

Simplify and secure server management from edge to cloud with HPE Compute Ops Management, an as-a-service compute management experience that delivers greater simplicity, agility, and speed across your entire HPE Alletra Storage Server 4000 portfolio.

Expanded DMTF Redfish APIs enable you to programmatically manage and automate tasks and bulk actions, reducing risks and demands on your limited IT resources particularly in large scale and geographically distributed deployments.



Technical specifications

HPE Alletra Storage Server 4210

Memory slots	32 DDR5 memory slots (16 per processor) for 4 TB maximum
Storage controller	Optional Intel® Virtual RAID on CPU (Intel® VROC)
Accelerators	Up to 3 GPU or FPGA (single width, 75 W consumes expansion slot)
Form factor	1U rack mount
Expansion slots	Up to 3 PCIe Gen5 slots and 2 OCP 3.0 slots
Network controller	Up to 3 PCIe and 2 OCP 3.0 controllers
Security	TPM 2.0, iDevID, Silicon Root of Trust, logical Configuration Lock, Secure Boot, Secure Start, optional Self-Encrypting Drives, optional Secure Erase, optional lockable security bezel, optional HPE Server Security Optimized Service
Power specifications	2 HPE Flexible Slot (Flex Slot) Power Supplies of up to 2200 W per Power Supply
Processor family	Dual Intel® Xeon® 6 Scalable processors
Dedicated boot device	Optional hardware mirrored dual M.2 NVMe SSDs (internal or rear)
Front drive bays	Configurable 20, 16, or 12 E3.S 1T NVMe
Infrastructure management	Included - HPE iLO7 Standard with Intelligent Provisioning (embedded), HPE OneView Standard (download required). Optional - HPE iLO7 Advanced upgradable with license, HPE GreenLake for Compute Ops Management (subscription), and HPE OneView Advanced.
System cooling	up to 7 hot-pluggable system fan modules with N+1 rotor redundancy, Close Loop Liquid Cooling Heatsink & Fan kit, or Direct Liquid Cooling Solution.
Warranty	3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response

[1] 6400 MT/s versus 5600 MT/s for the 5th generation Intel® Xeon® Scalable processors.



For additional technical information, available models and options, please reference the QuickSpecs

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## HPE Services

No matter where you are in your transformation journey, you can count on HPE Services to deliver the expertise you need when, where and how you need it. From strategy and planning to deployment, ongoing operations and beyond, our experts can help you realize your digital ambitions.

### Advisory & Professional services

Experts can help you map out your path to hybrid cloud and optimize your operations.

### Managed services

HPE runs your IT operations, giving you unified control, so you can focus on innovation.

### Support services

Optimize your entire IT environment and drive innovation. Manage day-to-day IT operational tasks while freeing up valuable time and resources.

- **HPE Complete Care Service:** a modular service designed to help optimize your entire IT environment and achieve agreed upon IT outcomes and business goals. All delivered by an assigned team of HPE experts.
- **HPE Tech Care Service:** the operational service experience for HPE products. The service provides access to product specific experts, an AI driven digital experience, and general technical guidance to help reduce risk and search for ways to do things better.
- **HPE Multivendor Services:** Single point of accountability for managing on-site hardware and software support for multivendor products. HPE experts help manage your IT across technologies and platforms for HPE and non-HPE technologies, acting as the single point of contact for your IT operational needs.

### Lifecycle Services

Address your specific IT deployment project needs with tailored project management and deployment services.

### HPE Education Services

Training and certification designed for IT and business professionals across all industries. Create learning paths to expand proficiency in a specific subject. Schedule training in a way that works best for your business with flexible continuous learning options

**Defective Media Retention** is optional and allows you to retain Disk or eligible SSD/Flash Drives replaced by HPE due to malfunction.

## HPE GreenLake

HPE GreenLake edge-to-cloud platform is HPE's market-leading as-a-Service offering that brings the cloud experience to apps and data everywhere – data centers, multi-clouds, and edges – with one unified operating model, on premises, fully managed in a pay per use model.

If you are looking for more services, like **IT financing solutions**, please [explore them here](#).

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