

HPE Alletra Storage Server 4110



What's new

- 20 direct connect Enterprise & Datacenter SSD Form Factor (EDSFF) All-NVMe design with up to 315 GB/s of PCIe Gen5 bandwidth (or 20 SFF) in a dense, 1U standard rack depth form factor.
- Dual 4th or 5th generation Intel® Xeon® Scalable processors delivering more performance plus DDR5 memory with up to 75%[1] more bandwidth for demanding data processing workloads.
- Zero trust security from silicon to software and factory to cloud with HPE Integrated Lights Out 6, DMTF Security Protection Data Model support, and FIPS140-2 Self-Encrypting Drives.
- Cloud operating experience built on the HPE GreenLake Cloud Platform for simplified and automated lifecycle management including dramatically easier firmware management.

Overview

Are you looking for server-based data infrastructure with exceptional performance to accelerate your data-driven initiatives?

The HPE Alletra Storage Server 4110 is specifically designed to run your most performance demanding data storage-intensive workloads to power your data-driven initiatives to success. From data stores for machine learning (ML) and 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 shift from owning and maintaining to simply utilizing it. HPE Alletra Storage Server 4000 systems provide the data infrastructure for any successful data driven organization.

Features

Built for Data Applications

Purposefully engineered to accomplish more for your most performance-demanding data storage-intensive workloads and data-driven initiatives, the HPE Alletra Storage Server 4110 provides more data throughput, data processing, and data capacity in a seamless to deploy yet high density 1U form factor.

The symmetric system architecture delivers exceptional throughput with up to 62.5 GB/s (500 Gbps) of network bandwidth into the system, up to 64 GT/s for data in flight through the system, and up to 315 GB/s of PCIe Gen5 bandwidth to All-NVMe SSDs.

Store more data with up to 20 front accessible new generation Enterprise & Data Center SSD Form Factor (EDSFF) or Small Form Factor (SFF) NVMe SSDs for a total of over 300 TB in an ultra-dense, standard rack depth 1U form factor.

Unlock value from your data more quickly with two 4th generation Intel® Xeon® Scalable processors totaling up to 96 cores, support for a GPU or FPGA accelerator capable of many trillions of operations per second, and up to 4 TB DDR5 memory at 4800 MT/s or 5600 MT/s speed.

Secured End-to-End by Design

From silicon to software and factory to cloud, the HPE Alletra Storage Server 4110 is designed with zero trust security at its uncompromising core. 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 protect your data throughout the lifecycle of your infrastructure all the way to end-of-life decommissioning.

HPE Integrated Lights Out 6 (iLO 6) extends the hardware root of trust from protecting server firmware to now also protecting select storage and network controller firmware. Support for the DMTF Security Protection Data Model provides certificate-based controller authentication.

The integrated Trusted Platform Module and IDevID that are part of a 5-factor authentication model ensure the secure connection of your devices to the HPE GreenLake Cloud Platform while AES-256 encryption secures customer data within it.

Delivered with an Intuitive Cloud Experience

Simplify and transform your data infrastructure operations with the cloud experience for your HPE Alletra Storage Server 4110. Whether purchased or consumed as-a-service, you can now monitor and operate through intuitive fleet management SaaS and rich REST APIs.

Shift from owning and maintaining your server-based data infrastructure to simply consuming it as-a-service via HPE GreenLake, freeing precious financial and people resources to accelerate other aspects of your data-driven initiatives.

HPE GreenLake for Compute Ops Management, a default option, delivers a centralized console for self-service and automated monitoring and operations such as health status and firmware management across your entire HPE Alletra Storage Server 4000 fleet.

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



Technical specifications

HPE Alletra Storage Server 4110

Memory slots	24 DDR5 memory slots (12 per processor) for 6 TB maximum
Storage controller	Optional Intel® Virtual RAID on CPU (Intel® VROC)
Accelerators	Up to 1 GPU or FPGA (full-height half-length and under 75 W consumes expansion slot)
Form factor	1U rack mount
Expansion slots	Up to 2 full-height half-length PCIe Gen5 slots and 2 OCP 3.0 slots
Management software	HPE Integrated Lights-Out 6 (iLO 6), HPE GreenLake for Compute Ops Management, optional HPE OneView
Network controller	Up to 2 PCIe full-height half-length and 2 OCP 3.0 controllers, up to 200 Gb/s 1-port (consume expansion slots)
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 4th or 5th generation Intel® Xeon® Scalable processors
Dedicated boot device	Optional hardware mirrored dual M.2 NVMe SSDs (internal only) or direct attached dual M.2 NVMe SSDs
Front drive bays	20 E3.S 1T NVMe or 20 SFF NVMe
Infrastructure management	HPE iLO 6 Standard, HPE iLO 6 Advanced upgradable with license HPE GreenLake for Compute Ops Management (subscription included) or optional HPE OneView (download required)
System cooling	7 hot-pluggable system fan modules with N+1 rotor redundancy
Warranty	3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response

[1] 5600 MT/s versus 3200 MT/s for the 3rd generation Intel® Xeon® Scalable processors.



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

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Managed services

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Support services

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

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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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