

HPE Alletra Storage Server 4120



What's new

- Successor to the industry leading HPE Apollo 4200 Gen10 server. Complement to the differentiated HPE Apollo 4200 Gen10 Plus server.
- More data throughput with up to 109%[1] more bandwidth, double the now PCIe Gen5 NVMe SSDs for cache and metadata, and up to four new generation tri-mode storage controllers.
- More data processing with latest 4th generation Intel® Xeon® Scalable processors delivering more performance plus DDR5 memory with up to 75%[2] more bandwidth.
- Enhanced zero trust security from silicon to software and factory to cloud with HPE

Overview

Are you looking for server-based data infrastructure with an optimal balance of performance and economic capacity for data-driven initiatives?

The HPE Alletra Storage Server 4120 is specifically designed to run the broadest range of data storage-intensive workloads to power your data-driven initiatives to success. From analytics data lakes and general purpose file and object Software-Defined Storage to active archives, converged data protection, and so much more, 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 platforms provide the data infrastructure for any successful data driven organization.

Integrated Lights Out 6, including new support for the DMTF Security Protection Data Model.

- Cloud operating experience built on the HPE GreenLake Cloud Platform for simplified and automated lifecycle management including dramatically easier firmware management.

Features

Built for Data Applications

The HPE Alletra Storage Server 4120 is engineered to accomplish more for a broad range of your data storage-intensive workloads and data-driven initiatives. It delivers an ideal balance of data capacity, throughput, and processing in a seamless to deploy, ultra-dense, standard depth 2U form factor.

Flexibly configure, easily serviceable storage capacity for the spectrum of workloads from analytics data lakes and cache-intensive workloads to active archives and converged data protection in 28 LFF, 24 LFF with 12 new E3.S 1T EDSFF NVMe or 6 SFF, or 48 SFF with 12 EDSFF NVMe or 6 SFF drive bays.

The symmetric system architecture delivers significantly more throughput with up to 125 GB/s (1000 Gbps) of network bandwidth into the system, up to 64 GT/s for data in flight through the system, and up to 225.6 GB/s of bandwidth to PCIe Gen5 NVMe, 24 Gb SAS, or 6 Gb SATA drives.

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 4120 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 Secure Encryption and Self-Encrypting Drives, 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 multi-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 4120. Whether purchased or consumed as-a-service, you can now monitor and operate through intuitive fleet management SaaS and richer REST APIs.

Shift from owning and maintaining your server-based data infrastructure to simply consuming it as-a-service via HPE GreenLake, freeing up 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

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Memory slots	24 DDR5 memory slots (12 per proccssor) for 4 TB maximum
Storage controller	1 to 4 16/32-port with 8 GB cache (consume expansion slots) and 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	2U rack mount
Expansion slots	Up to 8 full-height half-length PCIe Gen5 slots and 2 OCP 3.0 slots with 2 processors installed
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 2-port (consume expansion slots)
Security	TPM 2.0, iDevID, Silicon Root of Trust, logical Configuration Lock, Secure Boot, Secure Start, optional controller-based Secure Encryption, 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	Single or 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	24 LFF SAS/SATA or 48 SFF SAS/SATA
Rear drive bays	Optional 12 E3.S 1T Gen5 NVMe, 6 SFF Gen4 NVMe/SAS/SATA, or 4 LFF SAS/SATA
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	5 system dual-fan modules with N+1 rotor redundancy
Product dimensions (metric)	87.50 x 448.00 x 812.80 mm
Warranty	3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response

[1] Based on 24 LFF and 12 EDSFF configuration comparing to HPE Apollo 4200 Gen10 Plus.

[2] 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

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.
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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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