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 Integrated Lights Out

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 GreenLake Flex Solutions, 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.

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

– Cloud operating experience built on GreenLake 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 GreenLake 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 GreenLake Flex Solutions, freeing up precious financial and people resources to accelerate other aspects of your data-driven initiatives.

HPE 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 4120
Memory slots	24 DDR5 memory slots (12 per procrssor) for 4 TB maximum
Accelerators	Up to 1 GPU or FPGA (full-height half-length and under 75 W consumes expansion slot)
Expansion slots	Up to 8 full-height half-length PCIe Gen5 slots and 2 OCP 3.0 slots with 2 processors installed
Form factor	2U rack mount
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)
Storage controller	1 to 4 16/32-port with 8 GB cache (consume expansion slots) and optional Intel® Virtual RAID on CPU (Intel® VROC)
Infrastructure management	HPE iLO 6 Standard, HPE iLO 6 Advanced upgradable with license HPE Compute Ops Management (subscription included) or optional HPE OneView (download required)
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
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.

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 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.

GreenLake

GreenLake is the cloud to run and manage your entire hybrid landscape—private, public, and edge. It helps you to:

— Streamline IT Operations across compute, storage, and networking without the chaos

— Unify and secure data, as you move faster

— Accelerate AI, from pilot to production

The result: greater operational efficiency, lower TCO, and faster AI delivery—all from one unified, intelligent platform built for today's hybrid enterprise.

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

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Parts and components that have reached their maximum supported lifetime and/or the maximum usage limitations as set forth in the manufacturer's operating manual, product quick-specs, or the technical product data sheet will not be provided, repaired, or replaced as part of these services.

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