HPE GreenLake

HPE Alletra 4120

Alletra Storage Arrays

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

Overview

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

The HPE Alletra 4120 data storage server is specifically designed to run the broadest range of data storage-centric workloads to power your data-driven initiatives to success. From deep archives and data protection to active analytics data lakes, file and object Software-Defined Storage, 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

delivering more performance plus DDR5 memory with up to 50%[2] more bandwidth.

- Enhanced zero trust security from silicon to software and factory to cloud with HPE 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.

to shift from owning and maintaining to simply utilizing it. HPE Alletra 4000 data storage servers provide the data infrastructure for any successful data driven organization.

Features

Built for Data Applications

The HPE Alletra 4120 is engineered to enable you to accomplish more for a broad range of data storage-centric 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 exceptional, easily serviceable storage capacity for the spectrum of workloads from deep archives to analytics data lakes and cache-intensive workloads in 28 LFF, 24 LFF with 12 new generation EDSFF NVMe or 6 SFF, or 48 SFF with 12 EDSFF NVMe or 6 SFF drive bays[3].

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 6 TB DDR5 memory at 4800 MT/s speed.

Secure by End-to-End Design

From silicon to software and factory to cloud, the HPE Alletra 4120 data storage server 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 Smart 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 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.

Intuitive Cloud Experience

Simplify and transform your data infrastructure operations with the cloud experience for your HPE Alletra 4120 data storage server. 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 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 4120

Storage controller	1 to 4 with up to 8 GB cache (consume expansion slots)
Accelerators	Up to 1 GPU or FPGA (within full-height half-length and under 75 W, consumes expansion slot)
Form factor	2U rack mount standard depth
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	Optional up to 2 PCIe full-height half-length and 2 OCP 3.0 controllers, up to 200 Gb/s 2p (consume expansion slots)
Security	TPM 2.0, iDevID, Silicon Root of Trust, logical Configuration Lock, Secure Boot, Secure Start, optional data at rest hardware encryption, optional Secure Erase, optional lockable security bezel, optional HPE Server Security Optimized Service
Power specifications	Up to 2 HPE Flexible Slot (Flex Slot) Power Supplies and up to 2200 W per Power Supply
Processor Family	Single or dual 4th generation Intel® Xeon® Scalable processors
Dedicated Boot Device	Optional HPE NS204i-u Gen11 (internal only)
Front Drive Bays	24 LFF SAS/SATA or 48 SFF SAS/SATA
Rear Drive Bays	Optional 12 EDSFF E3.S 1 T NVMe, 6 SFF Tri-mode, or 4 LFF SAS/SATA
Product Dimensions (metric)	87.50 x 448.00 x 805.50 mm
Warranty	3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response
Memory slots	24 DDR5 memory slots (12 per procrssor) for 6 TB maximum

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

[2] 4800 MT/s versus 3200 MT/s for the 3rd generation Intel® Xeon® Scalable processors.

[3] Planned availability of Q2 2023.

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HPE Pointnext Services

HPE Pointnext Services brings together technology and expertise to help you drive your business forward and prepare for whatever is next.

Operational Services from HPE Pointnext Services

HPE Pointnext Tech Care provides fast access to product-specific experts, an AI-driven digital experience, and general technical guidance to help enable constant innovation. We have reimagined IT support from the ground up to deliver faster answers and greater value. By continuously searching for better ways to do things—as opposed to just fixing things that break—HPE Pointnext Tech Care helps you focus on achieving your business goals.

HPE Pointnext Complete Care is a modular, edge-to-cloud IT environment service that provides a holistic approach to optimizing your entire IT environment, and achieving agreed upon IT outcomes and business goals through a personalized and customer-centric experience. All delivered by an assigned team of HPE Pointnext Services experts.

HPE Integration and Performance Services help you customize your experience at any stage of your product lifecycle with a menu of services based on individual needs, workloads, and technologies.

- Advise, design, and transform
- Deploy
- Integrate and migrate
- Operate and improve

- Financial Services
- GreenLake Management Services
- Retire and sanitize
- IT Training and personal development

Other related services

HPE Education Services delivers a comprehensive range of services to support your people as they expand their skills required for a digital transformation. Consult your HPE Sales Representative or Authorized Channel Partner of choice for any additional questions and support 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
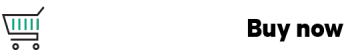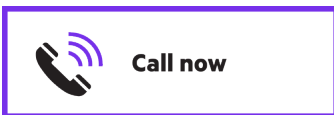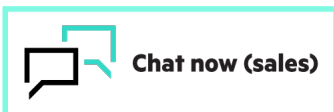
HPE GreenLake is HPE's market-leading IT as-a-Service offering that brings the cloud experience to apps and data everywhere – data centers, multi-clouds, and edges – with one unified operating model. HPE GreenLake delivers public cloud services and infrastructure for workloads on premises, fully managed 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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