

# HPE Alletra 4110

Alletra Storage Arrays



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## What's new

- 20 direct connect Enterprise and Data Center Standard Form Factor (EDSFF) [1] 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 generation Intel® Xeon® Scalable processors delivering more performance plus DDR5 memory with up to 50%[2] more bandwidth for demanding data processing workloads.
- Zero trust security from silicon to software

## Overview

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

The HPE Alletra 4110 data storage server is specifically designed to run your most performance demanding data storage-centric 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

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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.

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 4000 data storage servers provide the data infrastructure for any successful data driven organization.

## Features

### Built for Data Applications

Purposefully engineered to enable you to accomplish more for your most performance-demanding data storage-centric workloads and data-driven initiatives, the HPE Alletra 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.

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 3 TB DDR5 memory at 4800 MT/s speed.

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

### Secure by End-to-End Design

From silicon to software and factory to cloud, the HPE Alletra 4110 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 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.

### Intuitive Cloud Experience

Simplify and transform your data infrastructure operations with the cloud experience for your HPE Alletra 4110 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 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 4110

<b>Accelerators</b>	Up to 1 GPU or FPGA (full-height half-length and under 75 W, consumes expansion slot)
<b>Form factor</b>	1U rack mount standard depth
<b>Expansion slots</b>	Up to 2 full-height half-length PCIe Gen5 slots and 2 OCP 3.0 slots
<b>Management software</b>	HPE Integrated Lights-Out 6 (iLO 6), HPE GreenLake for Compute Ops Management, optional HPE OneView
<b>Network controller</b>	Optional up to 2 PCIe full-height half-length and 2 OCP 3.0 controllers, up to 200 Gb/s 1p (consume expansion slots)
<b>Security</b>	TPM 2.0, iDevID, Silicon Root of Trust, logical Configuration Lock, Secure Boot, Secure Start, optional Self-Encrypting Drives, optional lockable security bezel, optional HPE Server Security Optimized Service
<b>Power specifications</b>	Up to 2 HPE Flexible Slot (Flex Slot) Power Supplies and up to 2200 W per Power Supply
<b>Processor Family</b>	Dual 4th generation Intel® Xeon® Scalable processors
<b>Dedicated Boot Device</b>	Optional HPE NS204i-u Gen11 (internal only)
<b>Front Drive Bays</b>	20 EDSFF E3.S 1T NVMe or 20 SFF NVMe
<b>Warranty</b>	3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response
<b>Memory slots</b>	24 DDR5 memory slots (12 per processor) for 3 TB maximum

[1] Planned availability of Q2 2023.

[2] 4800 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](#)

## 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

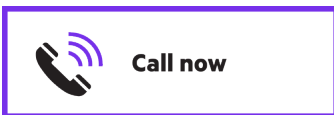
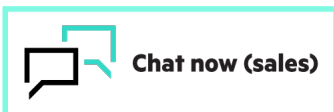
[HPE GreenLake](#) is HPE's market-leading IT as-a-Service offering that brings the cloud experience to apps and data everywhere – data centers, multi-clouds, and edges – with one unified operating model. HPE GreenLake delivers public cloud services and infrastructure for workloads on premises, fully managed in a pay per use model.

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