

HPE Alletra Storage 5000



What's new

- Delivers up to 25% faster performance than previous HPE Nimble Storage Adaptive Flash Arrays.
- Developed from the foundation of HPE Nimble Storage Adaptive Flash Array architecture, proven to deliver speed, efficiency, and resiliency – and now with Cloud operational agility.
- Unified Cloud management enables you to globally manage and monitor your entire fleet of storage from a single SaaS-based cloud console that's accessible from any location, on any device.
- Transform from LUN-centric to AI-driven, application centric storage provisioning. No storage expertise required, and no more guesswork.
- Eliminate chaos with industry-leading AI Operations for infrastructure driving autonomous operation, transforms the support experience and helps ensure your applications are always-on and always fast.
- Designed for high availability and

Overview

Are you looking for simple, reliable, and cost-efficient flash storage for your primary and secondary workloads? HPE Alletra Storage 5000 is a cloud native data infrastructure platform adaptively designed for a mix of primary workloads and secondary backup and disaster recovery. Bring cloud operational experience to your on-premises storage with GreenLake Flex Solutions – simplifying storage management across the lifecycle, from deployment to provisioning to upgrades. Eliminate application disruptions and ensure fast, consistent performance with the insight and intelligence of HPE InfoSight, most advanced AI for infrastructure. Leverage an enterprise-grade platform with guaranteed 6x9s availability and extreme data integrity and resiliency. Increase storage efficiency and reduce costs with up to 5:1 data reduction. Consume as a service via GreenLake Flex Solutions – letting you shift from buying and maintaining data infrastructure to simply accessing and utilizing it.

extreme resiliency requirements with 6x9s availability guaranteed and Triple+ Parity RAID as standard with zero performance impact.

Features

AI-driven

Predict and prevent disruptions across storage, services, and virtual machines (VMs), resulting in savings of over 1.5 million hours of lost productivity due to downtime. Rely on 99.9999% (six-nines) guaranteed data availability.

Redefine the support experience with predictive support automation that eliminates time-consuming, frustrating escalations with automated L1 and L2 and direct access to experts.

Pinpoint issues between storage and VMs and underutilized virtual resources without effort.

Take the guesswork out of managing data infrastructure with AI-driven recommendations that improves performance, drives higher availability, and optimizes resource utilization and planning.

Built for Cloud

Simplify and automate on premises storage management with the speed and agility of a cloud operational experience – powered by data-driven intelligence. This makes underlying infrastructure invisible while shifting operations to be application, not infrastructure, centric.

Get started in minutes with streamlined device deployment. Simply rack the infrastructure, plug in the power cords, and connect the network cables. With a few clicks, the new system is configured and available in your fleet, ready to serve data for application workloads.

Automate and optimize app deployment with intent-based provisioning. Select the storage tier and workload type, specify the capacity and protection policy, and let AI-driven intelligence automatically optimize your SLAs by recommending the best-suited system across your fleet for your new workload.

100% cloud-managed infrastructure means you can globally monitor and manage your entire fleet of block storage from a single SaaS-based cloud console that's accessible from any location, on any device - so managing hundreds of systems across geographies is as simple as managing one.

Thanks to SaaS-based delivery, new data services instantly become available to you. Data plane software upgrades are non-disruptive and intelligently matched to a given system.

Consume as-a-Service

Shift from owning and maintaining data infrastructure to simply accessing and utilizing it on-demand. A flexible as-a-Service consumption model with GreenLake Flex Solutions enables you to avoid over- and under-provisioning concerns, budget constraints, and complex procurement cycles.

Scale on-demand and as necessary, with buffer capacity for unexpected workloads or usage demands.

Shift from heavy upfront costs to a transparent and predictable monthly subscription.

Consuming as a service shortens project deployment times, frees up capital and IT resources, aligns spending with business needs, and boosts financial flexibility and operational speed.

Flash Performance for Mixed and Mainstream Workloads

Ultra-efficient architecture - built from the ground up to optimize flash with the highest efficiency, delivering fast, consistent performance and industry leading data efficiency for business-critical applications.

Write to cost-optimized disk at flash speeds through write serialization.

Dynamic flash caching accelerates reads even as workloads change in real time.

Always-on data reduction delivers up to 5X space savings without performance penalty.

Easily scale without disruption: Grow the capacity and performance of a running system independently and non-disruptively.

Technical specifications	HPE Alletra Storage 5000
Drive description	2 TB, 4 TB, 6 TB, 10 TB, 14 TB
Capacity	Up to 294 TB per enclosure
Host interface	Fibre Channel and iSCSI network connectivity
Enclosures	(6) Maximum, Expansion Shelves supported. Powered by redundant Platinum or Titanium efficiency power supplies.
Storage controller	Redundant storage controllers
Maximum drives per enclosure	21 HDDs and 6 Flash Cache SSDs per base array plus 21 HDDs and 3 or 6 Flash Cache SSDs per Expansion Shelf.
Cache	960 GB, 1.92 TB, 3.84 TB, 7.68 TB
Availability features	Triple Parity RAID for data protection. 99.9999% guaranteed availability. Redundant HW/SW design - no single points of failure.
Compatible operating systems	<p>Microsoft Windows® Server</p> <p>VMware ESXi®</p> <p>SUSE® Linux Enterprise Server (SLES)</p> <p>Red Hat® Enterprise Linux (RHEL)</p> <p>Ubuntu Server Edition LTS</p> <p>Oracle Linux</p> <p>Oracle Solaris®</p> <p>Citrix® XenServer®</p> <p>IBM AIX, HP-UX</p> <p>For the latest information on supported operating systems refer to Single Point of Connectivity Knowledge (SPOCK) for HPE Storage Products (SPOCK): https://www.hpe.com/storage/spock</p>
Product dimensions	17.58 x 43.9 x 89 cm
Weight	65 kg (ES3 Expansion Shelf: 52 kg)
Warranty	HPE Alletra Storage 5000 comes with the following warranties: 1-year, parts-only warranty for hardware components and 90 day software updates for defects. Additionally, HPE will provide phone support for replacing a defective part. Additional support coverage is required for HPE Alletra Storage 5000. NOTE: For hardware warranty claims, defective part must be received before replacement parts are shipped.

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](#)

Visit [HPE.com](https://www.hpe.com)

[Chat now](#)

© Copyright 2026 Hewlett Packard Enterprise Development LP. The information contained herein is subject to change without notice. The only warranties for Hewlett Packard Enterprise products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. Hewlett Packard Enterprise shall not be liable for technical or editorial errors or omissions contained herein.

Parts and Materials: HPE will provide HPE-supported replacement parts and materials required to maintain the covered hardware.

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.

Citrix® and XenServer® are registered trademarks of Citrix Systems, Inc., and/or one or more of its subsidiaries. ; IBM AIX® is a registered trademark of International Business Machines Corporation of the United States.; Microsoft®, Windows®, and Windows Server® are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.; Red Hat® Enterprise Linux®, Linux® are registered trademarks of Linus Torvalds in the United States and other countries.; Solaris® are registered trademarks of Oracle and/or its affiliates in the United States and other countries.; SUSE Linux Enterprise Server (SLES) is a trademark of SUSE LLC or its subsidiaries or affiliates.; Ubuntu® is a registered trademark of Canonical Ltd. ; VMware ESXi® is a registered trademark of VMware, Inc. All third-party marks are property of their respective owners.

Image may differ from the actual product.

[PSN1014656646INEN](#), April, 2026.

HEWLETT PACKARD ENTERPRISE

[hpe.com](https://www.hpe.com)

