

HPE Alletra Storage MP B10000

HPE Alletra Storage MP B10140 Controller Node (S4V66A)



What's new

- Consolidate your workloads and increase infrastructure efficiency on a single unified block and file storage platform with consistent management and simplicity at scale across the hybrid cloud.
- Boost the security of your data with integrated real-time ransomware detection and a comprehensive defense workflow aligned with the NIST cyber resilience framework.
- Start small, scale up—from 15 TB to about 5.6 PB—with up to 16 JBOF shelves. Save costs in 2-drive and one-node increments, and gain more density with 4-node switchless setup.
- Transform your storage ownership experience with an expanded guarantee program that includes new SLAs for cyber resiliency, zero data loss and zero downtime, and energy efficiency.
- QLC (Quad-Level Cell) SSD support provides higher density, lower TCO,

Overview

HPE Alletra Storage MP B10000 provides mission-critical storage at midrange economics with the industry’s first disaggregated, scale-out block and file storage. Built on HPE Alletra Storage MP hardware and managed via GreenLake, this unique unified block and file storage offering brings an intuitive cloud experience, efficient scale, and extreme resiliency and performance to mission-critical apps — from large databases to modern cloud native apps to consolidated mixed workloads — at a midrange price point.

Get an intuitive, AI-driven cloud experience on-prem that simplifies management and shifts operations from infrastructure-centric to app-centric. Scale performance and capacity independently — and without disruption — with disaggregated storage. Transform IT outcomes with a set of unrivalled SLAs and guarantees for data availability and cyber resiliency.

and optimized price-performance for capacity-intensive workloads.

- Meet the data security, sovereignty and compliance requirements for highly regulated environments with a fully disconnected secure solution.

Features

Simplify Management with an Intuitive Cloud Experience On-Premises

Simplify operations and move faster with a cloud operational experience across the lifecycle— from install to upgrade — with an AI-driven cloud operational experience driven by GreenLake. A similar cloud-like experience is also offered for disconnected on-prem environments.

Simplified deployment: 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.

Deploy apps faster: Automate app deployment with intent-based provisioning. Select the storage tier, workload type, 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.

Unified storage management: 100% cloud-managed infrastructure means you can manage, monitor and protect your global storage environment from a single cloud console that's accessible from any location, on any device - so managing hundreds of systems across geographies is as simple as managing one.

Invisible upgrades: 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.

Superior Flexibility and Economics with Disaggregated, Scale-out Storage

Scale without limitations: Scale capacity and performance independently with disaggregated, scale-out storage – for greater efficiency and lower costs. Fine-tune, adapt and elastically scale your storage environments in line with workload requirements and evolving business needs.

Start small, scale big: Start small with cost-efficient two-node entry level configurations. Scale-up and scale-out to multi-node configurations with granular performance and capacity upgrades.

Non-disruptive upgrades: Boost ROI with on-line, non-disruptive, data-in-place upgrades without repurchasing existing storage.

Increase efficiency and cost savings with single controller node performance scaling. Reduce storage footprint and energy consumption significantly with 4-node switchless configuration.

Meet and exceed your sustainability goals with guaranteed below-threshold energy consumption and power saving features [1].

Ultimate Peace of Mind with Robust SLAs and Guarantees that Deliver Outstanding IT Outcomes

Get peace of mind with 100% Data Availability Guarantee [2]: Built on an AI-driven, disaggregated, no single-point-of-failure platform to guarantee resilient 100% data availability for your mission-critical apps.

Advanced DR and HA: Meet any recovery-point objective (RPO) and recovery-time objective (RTO) strategy with transparent business continuity and automatic fail-over across multiple sites, which comes with a Zero RTO/RPO Guarantee [3].

Boost defense against ransomware with Cyber Resiliency Guarantee [4]: Get access to an HPE Services expert within 30 minutes of reporting an outage resulting from a ransomware incident, enabling you to rapidly address and mitigate the impact of a cyberattack.

Accelerate your most demanding applications: Built on a unique, massively parallel, multi-node, and all-active platform, HPE Alletra Storage MP B10000 consolidates traditional and next-generation mission-critical applications at scale with predictable performance and ultra-low latency.

Industry's most advanced AI-Ops: Predict and prevent disruptions before they occur across the stack between storage and VMs. Take the guesswork out of managing storage with AI-driven recommendations. Reduce support escalations via predictive support automation and direct access to the experts.

Future Proofed Investment that Never Gets Old

No forklift upgrades: With the HPE free controller refresh program, you can protect your investment and keep your storage continuously up to date with a non-disruptive controller refresh. This reduces your TCO and saves an average of 30% over traditional forklift upgrades [5].

Constantly improving data services: Unleash the full potential of the B10000 with our all-inclusive software subscription. Get access to all our operating system features and enhancements, including AI-driven cloud operations on GreenLake, at no additional cost.

Store more for less with the HPE StoreMore Guarantee [6]: This guarantees total savings of at least 4:1 for your workloads - reducing physical storage costs, saving energy, and decreasing data center footprint.

30-day satisfaction guarantee [7]: Try HPE Alletra Storage MP B10000 for 30 days at no risk. If you are not completely satisfied with the benefits and capabilities of your storage system as described in the product specifications, we will work with you to make things right.

Technical specifications	HPE Alletra Storage MP B10140 Controller Node
Product Number	S4V66A
Drive description	NVMe SFF encrypted SSD: 1.92 TB, 3.84 TB, 7.68 TB, 15.36 TB, 30.72 TB QLC SSDs: 15.36 TB, 30.72 TB
Capacity	Up to 368 TB per enclosure HPE Alletra Storage MP B10100 (switchless), up to 1.1 PB per solution HPE Alletra Storage MP B10200 (switched), up to 5.8 PB per solution
Host interface	32Gb/s Fibre Channel, 10/25GbE iSCSI
Enclosures	2U form factor of HPE Alletra Storage MP
Storage controller	Redundant HPE Alletra Storage MP B10000 32-core, HPE Alletra Storage MP B10000 16-core, and HPE Alletra Storage MP B10000 8-core controller nodes support for two (2), three (3), and four (4) controller nodes per solution.
Maximum drives per enclosure	24 NVMe SSDs per enclosure B10100, up to two (2) expansion shelves per solution B10200, up to sixteen (16) expansion shelves per solution.
Cache	512 GB cache memory per 32-core Controller Node 256 GB cache memory per 16-core Controller Node 256 GB cache memory per 8-core Controller Node
Availability features	Redundant power, cooling modules, and fans; A minimum of dual redundant controller nodes
Compatible operating systems	Microsoft® Windows® Server and Microsoft® Hyper-V™ VMware ESX and ESXi Red Hat® Enterprise Linux® SUSE® Linux Enterprise Server (SLES)
Warranty	1-year, parts-only warranty for hardware components

[1] HPE Alletra Storage MP B10000- Unleash the power of sustainable storage:

<https://www.hpe.com/psnow/doc/a50013285enw>

[2] 100% Data Availability Guarantee: <https://www.hpe.com/psnow/doc/a00058506enw>

[3] Zero RTO/RPO Guarantee: <https://www.hpe.com/psnow/doc/a50013289enw>

[4] Cyber Resiliency Guarantee: <https://www.hpe.com/psnow/doc/a50013287enw>

[5] HPE Storage Substantiation: <https://www.hpe.com/psnow/doc/a00058506enw>

[6] StoreMore Guarantee: <https://www.hpe.com/psnow/doc/a00142353enw>

[7] 30-day Satisfaction Guarantee: <https://www.hpe.com/psnow/doc/a50003981enw>

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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