Data sheet

HPE Alletra Storage MP B10000

HPE Alletra Storage MP B10240 TAA-compliant Controller Node (SOR20A)

What's new

- Consolidate your workloads and increase infrastructure efficiency on a unified block and file storage that scales out to 6 nodes seamlessly with leading resiliency against simultaneous 2-node failure.
- Boost cyber security with built-in real-time ransomware detection for both file and block storage that integrates with broader SIEM and XDR security ecosystems for holistic threat visibility.
- Prevent disruptions with agentic support automation that detects issues sooner and resolves them faster with little human intervention.
- Simplify data protection with integrated, application-consistent backup to HPE StoreOnce and rapid recovery—without changing existing workflows or requiring an ISV.
- Start small, grow big—from 15 TB to 5.9 PB—with non-disruptive

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, agentic 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.

conversion from switchless to switched configurations. Add performance one-node at a time and capacity 2-drive at a time independently.

– Transform your storage ownership experience with the Future-Ready Program, including the updated 5:1 StoreMore Guarantee and guarantees for cyber resiliency, zero RPO/RTO, and energy efficiency.

Features

Simplify Management with agentic AI operations across the hybrid cloud

Accelerate operations with an AI-driven cloud experience across the lifecycle—from installation to upgrades—delivered through Data Services Cloud Console on GreenLake.

Quick and easy 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.

Provision 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.

Prevent disruptions with agentic self-remediation: The B10000 uses AI agents to detect issues, analyze root causes, and recommend fixes in real time—helping resolve complex problems earlier, reduce escalations, and lower downtime risk.

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.

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. Convert from switchless to switched configurations non-disruptively as needed.

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].

Boost cyber security with real-time ransomware detection and automatic protection

Minimize risks of ransomware attacks with AI-driven built-in ransomware detection for file and block storage that has been evaluated against 100+ ransomware strains by HPE Cybersecurity Center of Excellence. It integrates with existing SIEM and XDR platforms to simplify security deployment.

Speed recovery from ransomware incidents 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.

Run mission-critical workloads 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.

Simplify data protection and reduce cost with integrated application-consistent backup to HPE StoreOnce, enabling faster and more predictable recovery outcomes without an ISV.

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].

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 AIdriven 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 5:1 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 B10240 TAA-compliant Controller Node
Product Number	S0R20A
Storage controller	Redundant HPE Alletra Storage MP 32-core nodes per chassis
Warranty	1-year, parts-only warranty for hardware components
Capacity	Up to 2.9 PB per solution
Drive description	NVMe SFF SED, FIPS, FIPS-TAA TLC SSDs: 1.92 TB, 3.84 TB, 7.68 TB, 15.36 TB, 30.72 TB QLC SSDs: 15.36 TB, 30.72 TB
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
Enclosures	2U (2-node) or 4U (4-node) form factor of HPE Alletra Storage MP
Maximum drives per enclosure	Up to 24 NVMe SSDs per expansion shelf up to eight (8) expansion shelves per solution
Host interface	100 GbE iSCSI 100 GbE NVMe/TCP 64/32/16Gb Fibre Channel 64/32/16Gb NVMe/FC 10/25GbE iSCSI 10/25GbE NVMe/TCP
Compatible operating systems	Microsoft® Windows® Server and Microsoft® Hyper-V™ VMware® ESX and ESXi Red Hat® Enterprise Linux® SUSE® Linux® Enterprise Server (SLES)
Availability features	Redundant power, cooling modules, and fans; A minimum of dual redundant controller nodes

[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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