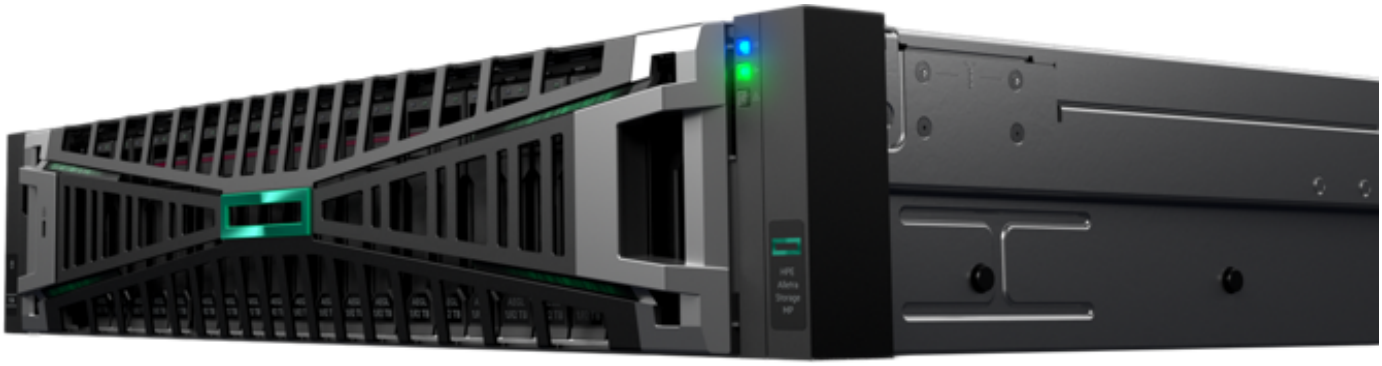
Data sheet

HPE Alletra Storage MP X10000

HPE Alletra Storage MP X10250 Controller Node (R7C71A)



What's new

- The X10000 is the first object storage platform to achieve NVIDIA®-Certified Storage validation for object-based systems at the Foundation level
- 2x Performance. 2x Capacity. Scale Up to 16 Nodes and 16 JBOFs.
- Now supports both Remote Direct Memory Access (RDMA) for objects and file, and NVIDIA® GPUDirect® for objects
- New Data Intelligence Node based on HPE ProLiant DL380a Gen 1 2 is now available for HPE Alletra Storage MP X10000
- New Made in Saudi Uber SKUs for HPE Alletra Storage MP X10000, enabling support for local manufacturing requirements in Saudi Arabia, preserving the same configurations, components and functionality.

Overview

Data drives modern business, providing insights, innovation, and competitive advantage. To stay ahead, organizations must accelerate and prioritize their data-driven modernization efforts. However, this journey is often hindered by challenges such as limited performance, scalability limitations, and operational complexity.

HPE Alletra Storage MP X10000 is a next-generation, software-defined, scale-out data system that delivers high-performance unstructured data storage services, data intelligence services, and an architecture designed for exabyte-scale capacities to accelerate time-to-value from data-intensive workloads, including intelligent storage for Retrieval-Augmented Generation (RAG) and large language models (LLMs), S3-compatible active data lakes, and modern data protection. The X10000 is managed through GreenLake, which uniquely enables simplified and unified cloud management of HPE's storage services, allowing enterprises to optimize their hybrid estate.

Features

Intelligent Unstructured Data System

Architected to accelerate insights and deliver rapid time to value with optimal time to first byte and time to first inference.

Data Services Cloud Console provides a single application to manage all your HPE IT resources, including the HPE Alletra Storage MP X10000. The console provides quick, easy access to reports, enables rapid provisioning of buckets, and comprehensive monitoring of the HPE Alletra Storage MP hardware.

HPE Alletra Storage MP Disconnected is a simple-to-manage, secure, enterprise-grade object storage solution for effective on-premises data management. It is built on the GreenLake dedicated platform for environments requiring limited internet connectivity.

It leverages AI-powered metadata enrichment to transform raw data into structured, meaningful information for advanced analytics and governance. Automatic vector embeddings extraction enhances the speed, quality, and relevance of data for RAG, LLMs, and analytics.

Shared Everything Distributed Architecture

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.

Scale Up to 16 Nodes and 16 JBOFs.

All Flash Performance at Scale

Starting from a minimum of 35 TB to up to more than 16 PB, the X10000 scales to meet your unstructured data requirements.

High performance triple-level cell (TLC) flash drives enable the write performance required by today's most demanding applications. From checkpointing to logging, to backing up time-critical data, the X10000 system can address the most demanding challenges.

Cost-optimized four-level cell (QLC) flash drives optimize the cost of storing data while still providing the performance required by a wide range of applications.

Amazon Simple Storage Service (Amazon S3) API-Compatible Object Storage

By providing fast, reliable, Amazon S3 API-compatible object storage, the X10000 enables applications created in the cloud to run cost-effectively, under local control, in your data center.

Technical specifications	HPE Alletra Storage MP X10250 Controller Node
Product Number	R7C71A
Storage controller	High performance processing element for the HPE Alletra Storage MP X10000.
Warranty	1-year, parts-only warranty for hardware components
Shipping dimensions	35.09 x 62.97 x 4.1 cm
Shipping weight	9.58 kg
Capacity	Up to 1474 TB per enclosure. Up to 23.6 PB per solution.
Drive description	NVMe SFF TLC SSD: 1.92 TB, 3.84 TB, 7.68 TB, 15.36 TB, 30.72 TB NVMe SFF QLC SSD: 15.36, 30.72 TB, 61.44 TB
Cache	512 GB cache per controller
Enclosures	2U form factor of HPE Alletra Storage MP X10000
Maximum drives per enclosure	24 drives per enclosure. Up to16 enclosures per solution.
Host interface	10/25 Gbps or 100 Gbps Ethernet
Compatible operating systems	Compatible with Ethernet-capable hosts
Availability features	Redundant power, cooling modules, and fans a minimum of three redundant controller nodes. Triple-parity+ RAID protection.

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 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.

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