

# HPE MSA Gen7 Storage

HPE MSA 2070 10GBASE-T iSCSI LFF Storage (S1H45A)



## What's new

- Next generation HPE MSA Gen7 shared storage portfolio including the HPE MSA 2070, HPE MSA 2070 Flash Bundles, HPE MSA 2072 Hybrid Flash Bundles, and TAA-Compliant HPE MSA 2070 Storage arrays.
- Up to 2x more IOPS (random) and 30% more bandwidth (sequential) performance as compared to the previous generation HPE MSA Gen6 Storage.[1]
- Scale beyond 7 PB per array by adding up to 9 MSA 2U LFF 12-drive and/or SFF 24-drive expansion drive enclosures and new high-capacity HDD and SSD MSA media options.[2]
- Updated MSA Storage Management Utility (SMU v.4) that supports simple, fast access to the MSA Health Check Tool for routine system maintenance.
- Support for non-disruptive, online firmware

## Overview

Looking for simple, high-performance, and low-cost shared storage that delivers application acceleration across all your server workloads? HPE MSA Storage has been the leading shared storage solution for HPE ProLiant servers for almost three decades. With over 600,000 storage arrays sold, MSA continues to deliver on its promise of simple, fast, and affordable storage for SMB customers. The HPE MSA Gen7 Storage Array sets a new standard for entry-level shared storage by providing an affordable path to high-performance storage without compromising on the simplicity and reliability that its customers depend on. The MSA Gen7 array portfolio delivers up to 2X more system performance while supporting user scalability beyond 7 PB per array with new high-capacity media options. New Gen7 innovations supporting online system and media firmware updates, as well as simpler and faster access to the HPE MSA Health Check tool, reduce the complexity and time required for routine system maintenance.

## Features

### Simple - The Shared Storage System Anyone Can Use

Start with the unique and intuitive graphical user interface of HPE MSA Storage Management Utility (SMU) that provides step-by-step instructions and guided workflows to set up the array within minutes.

updates for both MSA Gen7 controllers and drive media.

System monitoring and maintenance available through a simplified dashboard offers "at-a-glance" views of system alerts, performance, and capacity usage. New HPE MSA Gen7 innovations include support for online controller/media firmware updates as well as simpler and faster access to MSA Health Check.

System architecture supporting hot-swap controllers, drives, and power supplies, enabling users to quickly complete upgrades and maintenance with minimal downtime.

### Fast - Real Performance You Can See and Feel

Next generation system architecture supporting incredibly fast performance for an entry-level storage solution. HPE MSA Gen7 delivers up to 2X more IOPS (random) performance with up to 30% more system bandwidth (sequential) as compared to HPE MSA Gen6 Storage.[1]

Real-time, automated data tiering for hybrid configurations, optimizing the use of high-performance SSD media as well as lower-cost HDD storage within the same array. With minimal investment in SSDs, users can increase system IOPS by up to 4X versus HDD-only configurations.[3]

HPE MSA-DP+ advanced RAID technology eliminates the use of idle spare drives by distributing spare capacity across all drives in the disk group and enabling drive rebuild times that are up to 25X faster than traditional RAID.[4]

### Affordable - Great Value Across All MSA Configurations

Start small and scale as needed with any combination of SSDs, Enterprise SAS or Midline SAS HDDs. "Grow as you go" upgrades are available through low-cost HPE MSA SSD and HDD media 6-packs.

Wide range of HPE MSA Gen7 Storage Array models including value-driven solution bundles for hybrid-flash and all-flash configurations providing a cost-effective path to high-performance storage on Day 1.

Minimize resources dedicated to daily maintenance and focus on business outcomes with HPE MSA Health Check. A cloud-based tool available to all MSA users at no additional charge, Health Check uses MSA system logs to assess performance and configurations against HPE MSA best practice guidelines.

## Technical specifications

## HPE MSA 2070 10GBASE-T iSCSI LFF Storage

<b>Product Number</b>	S1H45A
<b>Drive description</b>	Up to twelve LFF HDD and/or SSD per base array
<b>Capacity</b>	Up to 6.78 PB with maximum capacity expansion
<b>Storage controller</b>	2x 10GBase-T iSCSI 4-port Controller
<b>Compatible operating systems</b>	Windows Server®; VMware vSphere™; Red Hat® Linux; SUSE™ SLES; See HPE SPOCK for more details.
<b>Form factor</b>	2U rack mount
<b>Warranty</b>	Three-year limited warranty, parts exchange next business day delivery on all base arrays and drive enclosures. MSA drives and other options carry a separate warranty.



[1] Up to 2X performance increase compares HPE MSA Gen7 IOPS (783K) to HPE MSA Gen6 IOPS (395K).

[2] Scalability to 7.37 PB of raw storage capacity with the HPE MSA 30.72 TB SAS 12 G Read Intensive SFF SSD using 9 additional HPE MSA 2U 24-drive SFF Drive Enclosures.

[3] Testing performed by Demartek Test Labs comparing performance of HDD-only configurations versus hybrid-flash configurations utilizing both HDD and SSD media.

[4] Based on testing performed at HPE internal test labs.

[For additional technical information, available models and options, please reference the QuickSpecs](#)

## 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.

### Consulting 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.

### Operational 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.

### 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.

The Defective Media Retention (DMR) service feature option applies only to Disk or eligible SSD/Flash Drives replaced by Hewlett Packard Enterprise due to malfunction. Comprehensive Defective Material Retention (CDMR) allows you to keep all data retentive components.

## HPE GreenLake

HPE GreenLake edge-to-cloud platform is HPE's market-leading 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, on premises, fully managed in a pay per use model.

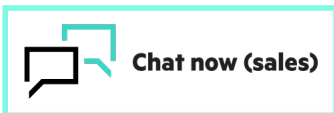
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