HPE XP8 Storage

HPE XP8 Hybrid Storage Array (R0L99A)

What's new

- HPE XP Mainframe Cyber ResiliencySolution - Provides air gapped data protection and a way to recover systemsfrom the logical data corruption caused by mainframe cyberattacks.
- 32 Gbps FICON Host Bus Adapters with Encryption Data-in-Flight (EDiF) - Increase data transfer rate by 2x when deploying these new FiCON HBA's. Then protect data in transit with optional EDiF.
- Fast Snap Plus - CopyLess replication with significant performance and space efficient snapshot benefits.
- HPE XP8 60 TB NVMe x4 Lanes SFF Flash Drive - The larger capacity

Overview

Do you require 100% uptime on your data center storage infrastructure without compromising performance, scale, or flexibility?

The HPE XP8 Storage array (Gen2) is the newest addition to the HPE XP storage family that has achieved 10-years of 100% data availability [1] across the entire installed base. There is no room to improve on 100%, but HPE XP8 is raising the bar by delivering industry leading 8-nines [5] of availability, nearly assuring continued 100% availability well into the future.

Without compromise means HPE XP8 Gen2 provides unrivaled performance, scale and flexibility. In terms of performance, HPE XP8 delivers over 33 million IOPs [2], well beyond competitors. HPE XP8 enables scalability up to 69 PB of internal capacity, and up to 255 PB of external virtual capacity. Flexibility to configure Hybrid or Flash, SAS or NVMe, HDD, SSD, FMD, or SCM. Newly added HW Compression Accelerator and Front-End FC NVMe adds even more performance, scale, and flexibility.

NVMe drive will allow customers to double the NVMe capacity in the HPE XP8 Storage Gen2.

Features

Proven 100% Data Availability [1], and Backed-up with a 100% Availability Guarantee [2]

Operating a business demands constant uptime, the risk of data loss or downtime must be minimized. HPE XP8 Storage is designed for 8-nines [5] of availability, virtually eliminating downtime risk. All active components are redundant, hot-swappable, and can be upgraded or replaced online.

HPE XP8 Storage with multi array virtualization provides 100% data availability [1] and storage uptime, even in the event of a data center disaster. Avoid both planned and unplanned downtime with disaster resistant HPE XP8 Remote Replication Suite. There's never a need to take HPE XP8 offline.

HPE XP8 Storage enables continuous Disaster Recovery capabilities before, during, and after array migrations with HPE XP8 Online Data Migration.

Move workloads from legacy HPE XP disk arrays to HPE XP8 with no interruption to applications, no server reboots and no suspension of your HPE XP Disaster Recovery solution.

Ultimate Flexibility for a Wide Range of Workloads and Applications

The HPE XP8 modular architecture enables customers to scale from a 2 DKC/2 controller entry configuration up to a massive 6 DKC/12 controller system. Scale up to 69 PB of internal storage capacity, plus up to 255 PB of virtualized external capacity. Scale up as needed, all online!

HPE XP8 supports a wide choice of media to meet customer requirements. NVMe and SAS SSDs, Storage Class Memory (SCM), Flash Module Device (FMD) and HDDs. Deploy the media that provides the best price performance balance for your application workload.

Start with an All-Flash or Hybrid two-controller base DKC, then upgrade to a performance DKC and secondary DKC to scale performance and capacity as needed.

HPE XP8 storage front-end FC NVMe support for more choice in host connectivity. Get faster connectivity between HPE XP8 and hosts, plus more efficient CPU utilization.

Dominant Performance that Meets Even the Most Extreme Workload Requirements

Delivering over 33 million IOPs [3], HPE XP8 Gen2 storage provides plenty of performance to meet extreme workload requirements.

The HPE XP8 HW compression accelerator increases data compression ratios for increased effective capacity. At the same time the HPE XP8 compression accelerator reduces the controller CPU compression workload which leads to increased overall performance. [4]

HPE XP8 Storage Class Memory (SCM) media offers the ultimate in performance and latency. Get up to 36 TB of data storage with sub-100 microsecond latency to solve performance challenges not addressable with legacy media types.

Built-in Intelligent Storage Management

HPE XP8 is intelligent storage that monitors, detects, and solves problems before they can affect availability and performance. This is achieved with integrated AI capabilities like Performance Advisor VM analytics, Continuous Track data analytics functionality, and future InfoSight support.

All-inclusive software, such as HPE XP8 Intelligent Storage Manager streamlines storage management, enables at-a-glance status of resources, simplifies deployment, management, and maintenance of HPE XP storage.

HPE XP8 Data Protection Manager provides simplified modern data protection and copy management to improve data availability, compliance, and agility. Data Protection Manager uses built-in intelligence to guide users in policy and workflow creation to automate replication and copy data management.

Improved Performance Advisor Software has a simplified GUI, expanded reporting capabilities, and robust VM Analytics.

The HPE XP8 storage has an easy to use task based GUI; Common/Consistent Command Line Interface (CLI); simplified serviceability, and simple provisioning with one-click volume creation, dynamic/automatic provisioning and optimization.

Technical specifications	HPE XP8 Hybrid Storage Array
Product Number	R0L99A
Drive description	Maximum Supported Quantity of Media Form Factors 2304 SFF SSD and HDD 1152 LFF HDD 576 FMD (Flash Module Device) 288 NVMe 96 SCM
Capacity	SSD 69 PB Raw; FMD 8 PB; NVMe 8.6 PB; SCM 36 TB; HDD 5.5 PB; External Storage 255 PB
Host interface	16Gb FICON SW FC (192 Ports) 16Gb FICON LW FC (192 Ports) 16/32 Gb FC HBA (192 Ports) 10G iSCSI (96 Ports)
Cache	6 TB maximum supported encrypted cache capacity
Compatible operating systems	HPE NonStop VMware® HP-UX IBM AIX Linux® Mainframe Microsoft® Windows® Oracle Solaris
Availability features	All active components are redundant, and hot-swappable. On-line scalable fully redundant hardware platform with unique High Availability SW solutions for complete business continuity and data protection. HPE XP8 Data Protection Manager creates an environment for easy, repeatable, and error-free replication. While HPE XP8 Remote Replication Suite delivers modern multi-array, multi-site disaster avoidance.
RAID support	RAID 1 (2D + 2P), RAID 1 (4D + 4P), RAID 5 (3D + 1P), RAID 5 (7D + 1P), RAID 6 (6D + 2P), RAID 6 (14D + 2P)
Warranty	Warranty level of hardware reactive support is 3-years, 24×7, with 4-hour onsite response.

[1] Based on HPE Quality Support tracking data.

[2] Based on HPE internal performance testing.

[3] HPE XP8 100% Data Availability Guarantee Program.

[4] HPE XP8 Compression Guarantee Program.

[5] The HPE XP7 Storage 8-nines reliability is determined by the Symbolic Hierarchical Automated reliability and Performance Evaluator (SHARPE) tool that models and predicts overall system availability using continuous time Markov chain (CTMC) methodology. Availability predictions for HPE XP8 Storage were performed by the HPE Solution Design Services team in October 2019. Contact your local HPE Sales representative for more information.

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

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.

Microsoft and Windows are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries. Oracle is a registered trademark of Oracle and/or its affiliates. Linux is the registered trademark of Linus Torvalds in the U.S. and other countries. VMware is a registered trademark or trademark of VMware, Inc. in the United States and/or other jurisdictions. All other third-party trademark(s) is/are property of their respective owner(s).

Image may differ from the actual product.

PSN1012183724WWEN, October, 2026.

HEWLETT PACKARD ENTERPRISE

hpe.com