

# HPE XP8 Storage

XP Storage



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## What's new

- HPE XP8 Gen2 controller that enables continued HPE XP8 innovation in availability, scale, and up to 2.5x higher performance and 45% lower latency.
- The HPE XP8 compression accelerator increases the compression ratio over SW-based solutions, resulting in greater effective capacity and higher overall performance.
- Front-end Fibre Channel NVMe support that enables complete end-to-end NVMe support.
- Data-In-Place (DIP) upgrade support. Move your HPE XP8 data, disks, and

## Overview

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

The HPE XP8 Gen2 Storage array is the newest addition to the HPE XP storage family that has achieved 7-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 that 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

enclosures to HPE XP8 Gen2 and future XP generations, protecting your investment, and all done online.

- Use the new HPE XP plug-in for VEEAM to perform backup and replication jobs, including to and from the cloud.
- Online volume expansion support with HA/CA/CAJ/BC/FS.

petabytes 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.

## 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 petabytes (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.

HPE XP8 provides flexibility and convenience for server or operating system maintenance by insuring data access. By presenting a virtual storage layer to hosts, one side of an application cluster can be taken offline, while the other side continues to access the XP8 data.

### **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.

The HPE XP8 Storage Class Media modules offer the ultimate in performance



and latency. Additionally, Flash Module Devices deliver guaranteed 2:1 [4] compression along with world class performance with zero performance penalty.

XP8 Smart Tiers and Thin Provisioning provides quick and automated flexibility for changing application needs. You can now configure all the capacity you will need for the future, only buy what you need today and allow the XP8 to automatically monitor and adjust for performance and capacity needs.

### 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 Storage

<b>Drive description</b>	SAS SFF SSD and HDD, LFF HDD, SCM (Storage Class Memory), FMD (Flash Module Device) and NVMe SFF
<b>Capacity</b>	69 PB Raw ~60 PB Usable 255 PB External Storage
<b>Host interface</b>	16Gb FICON SW FC (192 Ports) 16Gb FICON LW FC (192 Ports) 16/32 Gb FC HBA (192 Ports) 10G iSCSI (96 Ports)
<b>Cache</b>	6 TB maximum supported cache capacity 32 GiB or 64 GiB memory sizes Encrypted or non-encrypted cache back-up modules
<b>Availability features</b>	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. Supports multiple RAID levels for data protection.
<b>Compatible operating systems</b>	HPE NonStop VMware® HP-UX IBM AIX Linux® Mainframe Microsoft® Windows® Oracle Solaris
<b>Product Dimensions (metric)</b>	HPE XP8 Performance Disk Controller Chassis 483 x 763 x 434 mm (W/D/H)
<b>Weight</b>	148.1 kg HPE XP8 Performance Disk Controller Chassis Pair (includes chassis, controllers, PCB, no drives or adapters.
<b>Warranty</b>	Warranty level of hardware reactive support is 3-years, 24x7, 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.



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

## HPE Pointnext Services

HPE Pointnext Services brings together technology and expertise to help you drive your business forward and prepare for whatever is next.

### Operational Services from HPE Pointnext Services

HPE Pointnext Tech Care provides fast access to product-specific experts, an AI-driven digital experience, and general technical guidance to help enable constant innovation. We have reimagined IT support from the ground up to deliver faster answers and greater value. By continuously searching for better ways to do things—as opposed to just fixing things that break—HPE Pointnext Tech Care helps you focus on achieving your business goals.

HPE Pointnext Complete Care is a modular, edge-to-cloud IT environment service that provides a holistic approach to optimizing your entire IT environment, and achieving agreed upon IT outcomes and business goals through a personalized and customer-centric experience. All delivered by an assigned team of HPE Pointnext Services experts.

HPE Integration and Performance Services help you customize your experience at any stage of your product lifecycle with a menu of services based on individual needs, workloads, and technologies.

- Advise, design, and transform
- Deploy
- Integrate and migrate
- Operate and improve
- Financial Services
- GreenLake Management Services
- Retire and sanitize
- IT Training and personal development

### Other related services

HPE Education Services delivers a comprehensive range of services to support your people as they expand their skills required for a digital transformation. Consult your HPE Sales Representative or Authorized Channel Partner of choice for any additional questions and support options.

**Defective Media Retention** is optional and allows you to retain Disk or eligible SSD/Flash Drives replaced by HPE due to malfunction.

## HPE GreenLake

HPE GreenLake is HPE's market-leading IT 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. HPE GreenLake delivers public cloud services and infrastructure for workloads on premises, fully managed in a pay per use model.

If you are looking for more services, like **IT financing solutions**, please [explore them here](#).

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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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[PSN1012138134TWEN](#), April, 2023.