HPE NIMBLE STORAGE HF20 ADAPTIVE DUAL CONTROLLER 10GBASE-T 2-PORT CONFIGURE-TO-ORDER BASE ARRAY (Q8H72A)

Nimble Storage Arrays

WHAT'S NEW

- HPE Nimble Storage HF40C array and HF60C array provide higher effective capacity for workloads not requiring deduplication.
- Inline variable block deduplication and compression for increased data reduction.
- Performance up to 65% or more faster than previous HPE Nimble Storage Adaptive arrays. [5]
- Up to 200% or more price-performance improvement than previous HPE Nimble Storage Adaptive Flash arrays. [6]
- Secondary flash storage functionality for backup and disaster recovery (DR) workloads.

OVERVIEW

Struggling to find cost effective flash storage for your primary, secondary, and backup/DR workloads? The HPE Nimble Storage Adaptive Flash Arrays are like having two flash arrays in one. The array is truly adaptive – designed for both primary and secondary flash workloads. It is a hybrid flash array for mixed, primary workloads where cost-efficient flash performance is important. It can also serve as a secondary flash array for backup and disaster recover (DR) while allowing you to put your backup data to work. The flash-enhanced architecture is combined with HPE InfoSight predictive analytics for fast, reliable access to data and 99.9999% guaranteed availability [1]. Radically simple to deploy and use, the arrays are cloud-ready – providing data mobility to the cloud through HPE Cloud Volumes. Your storage investment made today will support you well into the future, thanks to our technology and business-model innovations.

FEATURES

Predictive Analytics

The HPE Nimble Storage Adaptive Flash arrays automatically predicts and resolves 86% of problems before you even know there is an issue. [2]

Transforms the support experience through predictive automation and Level 3-only support.

Holistic view across the infrastructure stack and resolves problems beyond just storage.

Simplifies planning with prescriptive forecasts into capacity, performance, and bandwidth requirements.

Makes infrastructure smarter and more reliable by learning from the installed base.

Radical Simplicity

HPE Nimble Storage Adaptive Flash Arrays are simple to deploy configure and manage.

Deploy flash on-premise, or in the public cloud through common data services across the HPE Nimble Storage family.

Seamlessly migrate data between all-flash, hybrid-flash, and multi-cloud storage.

Our timeless storage is your assurance of business value, no worries today, no worries tomorrow.

Radically easy to integrate with many ecosystems and has deep integration with VMware®, Microsoft® applications, Oracle®, Veeam, and others.

Flash Performance for Mixed and Mainstream Workloads

HPE Nimble Storage Adaptive Flash Arrays have speed and efficiency for mixed workloads with sub-millisecond response and greater efficiency than other hybrid arrays. [4]

Write to cost-optimized disk at flash speeds through write serialization.

Dynamic flash caching accelerates reads even as workloads change in real time.

Assigns and changes the service level of any volume at the click of a button ("Auto Flash", "All Flash", or "Minimal Flash").

Always-on data reduction delivers up to 5X space savings without performance penalty. [3]

Put Your Backup Data to Work

HPE Nimble Storage Adaptive Flash Arrays have secondary storage that does real work: flash performance lets you use your backup data for development/test, QA, analytics, and more.

Reduces the need for full backups since native application-consistent snapshots and replication plus integration with leading backup software. Speeds synthetic full backups from hours to minutes.

99.9999% (six-nines) guaranteed availability. Triple+ Parity RAID tolerates 3 simultaneous drive failures plus additional protection through intra-drive parity.

Application-granular, FIPS-certified encryption provides secure over-the-wire protection. Enhanced data shredding is built-in.

Built-in application-consistent snapshots and replication. Integration with leading backup software. Deep integration with Veeam availability software.

Technical specifications

HPE Nimble Storage HF20 Adaptive Dual Controller 10GBASE-T 2-port Configure-to-order Base Array

Product Number	Q8H72A
Capacity	Up to 210TB raw and 845TB effective capacity
Drive description	21 HDDs up to 10TB per HDD plus up to 6 - 3.84TB SSD drives
Enclosures	(6) Maximum, Expansion Shelves supported
Maximum drives per enclosure	21 HDDs (11 HDDs for HF20H) and Flash Cache per HF-Series base array plus HF-Series Expansion Shelf.
Host interface	Fibre Channel and iSCSI network connectivity
Storage controller	Redundant storage controllers
Availability features	Triple+ Parity RAID for data protection (Triple drive parity plus intra-drive parity). 99.9999% guaranteed availability. Redundant HW/SW design - no single points of failure.
Servers supported	HPE ProLiant rack mount and blades HPE Integrity servers Industry Standard Servers IBM® AIX servers Cisco® UCS Oracle® SPARC, x86 Maximum, depending on model
Compatible operating systems	Microsoft Windows® Server VMware ESXi® SUSE® Linux Enterprise Server (SLES) Red Hat® Enterprise Linux (RHEL) Ubuntu Server Edition LTS Oracle Linux Oracle Solaris® Citrix® XenServer® IBM AIX, HP-UX For the latest information on supported operating systems refer to Single Point of Connectivity Knowledge (SPOCK) for HPE Storage Products (SPOCK): https://www.hpe.com/storage/spock
Product Dimensions (metric)	17.58 x 43.9 x 89 cm
Weight	65 kg (ES3 Expansion Shelf: 52 kg)
Warranty	HPE Nimble Storage arrays come with the following warranties: 1-year, parts-only warranty for hardware components and 90 day software updates for defects. Additionally, HPE will provide phone support for replacing a defective part. Additional support coverage is required for HPE Nimble Storage arrays. NOTE: For hardware warranty claims, defective part must be received before replacement parts are shipped.

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.
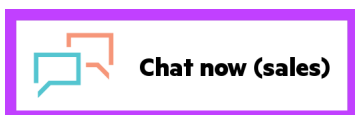
[1] HPE Six Nines Guarantee: hpe.com/h20195/v2/Getdocument.aspx?docname=a00026086enw

[2] Based on actual customer data collected by the HPE Nimble Storage Support organization. See also hpe.com/h20195/v2/Getdocument.aspx?docname=a00018503ENW

[3] Response times based on actual customer data collected by the HPE Nimble Storage Supportof 3D NAND flash. organization as of March 2017. Efficiency comparisons based on a combination of technologies including write serialization, dynamic flash caching of reads, and the use

[4] The HPE Nimble Storage Operating System (NOS) is built to improve the use of system resources including the CPU and memory. This enables the arrays to provide always-on data reduction without affecting the storage performance that is delivered

[5] Based on HPE Engineering performance tests versus the previous generation of HPE Nimble Storage Adaptive Flash arrays

[6] Based on a comparison of performance and pricing against previous generation of HPE Nimble Storage Adaptive Flash arrays. Performance based on HPE Engineering performance testing.

Hewlett Packard Enterprise