



Cloud-Oriented Converged Storage

Huawei OceanStor 6800 V3 mission critical storage system is a next-generation unified storage product specifically designed for mission critical applications. Employing a storage operating system built on a cloud-oriented architecture, a powerful new hardware platform, and a suite of intelligent management software, the 6800 V3 mission critical storage system delivers industry-leading functionality, performance, efficiency, reliability, and ease-of-use.

The system is ideal for applications such as large-database Online Transaction Processing (OLTP)/Online Analytical Processing (OLAP), file sharing, and cloud computing. Further, the system offers a wide range of efficient backup and disaster recovery solutions.

With a versatile set of capabilities, the 6800 V3 mission critical storage system can be widely applied in industries ranging from government, finance, telecommunications, energy, to Media and Entertainment (M&E).

Highlights

- Cloud architecture-oriented operating system, high-performance hardware platform, and a complete suite of smart management software.
- Convergence of file, flash, backup, high-, mid, and low-end storage, and third-party storage – allocate the resources you need, when you need them.
- Incorporation of industry-leading HyperMetro gateway-free solution yields 99.9999% reliability.

Cloud-Oriented Storage Software Multiple Controllers

Scale-out capability

Allows resources to be linearly expanded online to a maximum of eight controllers, 4 TB of cache, and 25.6 PB of storage capacity.

High-speed interconnection

In a single controller enclosure, multiple controllers can be expanded using PCIe 3.0 high-speed buses. As many as four controllers are integrated in merely a 6U space. For fast business growth and maximum return on investment, controllers directly exchange data to provide an optimal user experience with low latency, high bandwidth, and robust stability.

High availability

Controllers serve as a hot backup for each other, even allowing for failure of multiple controllers, offering 99.999% system availability, and protecting stability of online services.

Load balancing

Implements load balancing among controllers. Multiple controllers concurrently process the same host service to smash the performance bottleneck of a single controller, significantly improving service processing efficiency.



Reliability

Multi-dimensional business continuity protection

Redundancy among all components prevents single points of failure and ensures stable system operation. In addition, the 6800 V3 mission critical storage system adopts innovative block virtualization that speeds up data reconstruction by 20 times, greatly improving data reliability. The Hyper series data protection software simplifies user needs for local, remote, and multi-branch data protection, with the shortest Recovery Point Objective (RPO) in the industry, ranging from zero to 5 seconds, to maximize business continuity and data availability.

End-to-end data protection

Ensures comprehensive data integrity all the way from application systems, HBAs, storage systems, to disks. Such end-to-end data protection ensures service integrity for customers.

9-intensity earthquake resistance certification

Certification for 9-intensity earthquake resistance from the Seismic Quality Supervision and Test Center of Telecommunications Equipment for Information industry, prevents mechanical vibrations from causing device failures.

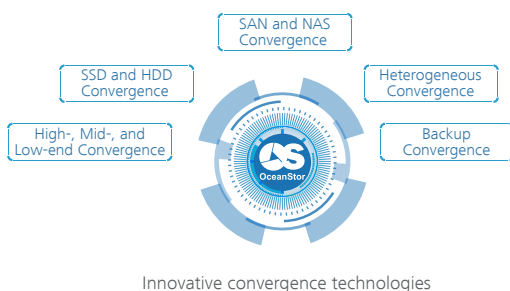
Convergence

Convergence of SAN and NAS

Provides elastic storage, simplifies service deployment, improves storage resource utilization, and reduces Total Cost of Ownership (TCO). Underlying storage resource pools provide both block and file services and shorten storage resource access paths to ensure that the two services are equally efficient.

Convergence of heterogeneous storage systems

A built-in virtualization function efficiently manages storage systems from multiple vendors and unifies resource pools for flexible, centralized resource allocation and protects their data. In addition, original data can be migrated to OceanStor 6800 V3 so that services can be accelerated. OceanStor 6800 V3 storage supports gateway mode.



Convergence of high-end, mid-range, and entry-level storage systems

Any size system interworks seamlessly so data can freely flow among storage products of different models without the assistance of third-party systems.

Convergence of SSDs and HDDs

Combining the advantages of rotating media and solid-state storage, the system offers an optimal balance of performance and cost. In the case of all-flash configuration, high performance and a low latency of 1 ms can be reached.

Convergence of primary and backup storage

Integrated backup functions achieve efficiency without additional backup software, simplifying backup management.

Multi-tenant and Service Level Agreement (SLA)

Enable intelligent allocation of storage resources in cloud computing environments. The system applies data isolation functions and data security policies such as data encryption and reliable destruction of obsolete data. With four service levels, the system allocates storage resources based on service priorities. High-priority services thus get an assured preference for system resources that minimizes response times.

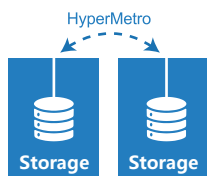


Smart series

Intelligence

Smart series efficiency improvement suite

Leverages dynamic storage tiering (SmartTier), intelligent data migration (SmartMotion), and innovative heterogeneous virtualization (SmartVirtualization) to achieve vertical, horizontal, and cross-system 3D data flow, significantly improving storage resource utilization.



HyperMetro Active-Active Solution

Advanced active-active solution

HyperMetro implements active-active mirroring with load balancing and cross-site takeover without service interruption, preventing data loss and system breakdown from occurring in critical application systems. The gateway-free design can effectively reduce the purchase cost, simplify the deployment, and enable the active-active solution to be smoothly upgraded to the Disaster Recovery Data Center Solution (Geo-Redundant Mode).

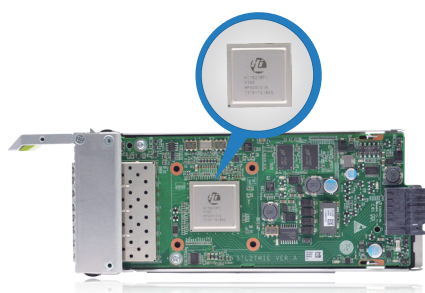


Unified management

Easy to Manage

Unified management

Powerful storage management software supports global topology views, capacity analysis, performance analysis, fault diagnosis, and end-to-end service visualization to simplify management of a wide range of devices.



SmartIO interface card

Industry-leading Storage Hardware

Outstanding performance

The system employs next-generation Intel multi-core processors, 16 Gbit/s Fibre Channel, 10 Gbit/s FCoE, and 56 Gbit/s InfiniBand host ports, PCIe 3.0 buses, and 12 Gbit/s SAS 3.0 disk ports. System bandwidth as high as 40 GB/s efficiently handles video and other large files, and supports million-level IOPS performance.

Exclusive SmartIO cards

Each SmartIO card supports 8 Gbit/s Fibre Channel, 16 Gbit/s Fibre Channel, 10 Gbit/s Ethernet and 10 Gbit/s FCoE.

Technical Specifications

Model	6800 V3
Controller Enclosure Specifications	
Storage Processors	Multi-core processors
System Cache (expanded by adding controllers)	256 GB to 4,096 GB
Maximum Number of Controllers	8
Supported Storage Protocols	Fibre Channel, FCoE, iSCSI, InfiniBand, NFS, CIFS, HTTP, and FTP
Front-end Port Types	8/16 Gbit/s Fibre Channel, 1/10 Gbit/s Ethernet, 10 Gbit/s FCoE, and 56 Gbit/s InfiniBand
Back-end Port Type	SAS 3.0 (each port supports 4 x 12 Gbit/s)
Maximum Number of Hot Swap -pable I/O Modules per Controller	6
Maximum Number of Front-end Ports per Controller	20
Maximum Number of Disks Supported by Two Controllers	3,200
Disk Types	SSD, SAS, NL - SAS

Technical Specifications

Model	6800 V3
Gateway Mode	Supported
Supported RAID Levels	0, 1, 3, 5, 6, 10, and 50
Maximum Number of Snapshots (LUN)	32,768
Maximum Number of LUNs	65,536
Maximum Number of Snapshots per File System	2,048
Maximum Capacity of a Single File	256 TB
Key Software Features	
Data Protection Software	HyperSnap (snapshot) HyperCopy (LUN copy) HyperClone (clone) HyperMirror (volume mirror) HyperReplication (remote replication) HyperLock (WORM) HyperMetro (active-active storage arrays) HyperVault (integrated backup)
Mission-critical Service Protection	SmartQoS (intelligent QoS control), SmartPartition (intelligent partitioning) SmartCache (intelligent SSD caching)
Resource Efficiency Improvement	SmartTier (intelligent storage tiering) SmartThin (intelligent thin provisioning) SmartMotion (intelligent data migration) SmartMulti-Tenant (multi-tenant) SmartMigration (LUN migration) SmartCompression (online compression) SmartDedupe (online deduplication) SmartQuota (quota management) and SmartErase (data destruction)
Storage Management Software	UltraPath (multipathing management) Cloud Service (remote maintenance and management) BCManager (disaster recovery management software) DeviceManager (manage a single device) eSight (manage multiple devices)
Virtualization Features	
Heterogeneous Virtualization	Consolidates storage resources of mainstream products to manage and allocate them in a flexible and unified manner
Block Virtualization	Balanced data distribution, quick fault recovery
Support for Computing Virtualization	Supported virtual machines: VMware, Citrix, Hyper-V, and FusionSphere Value-added features related to virtual environments: support for VMware VAAI and integration of VSphere and VCenter
Physical Specifications	
Power Supply	AC: 200V to 240V DC: 192V to 288V
Dimensions (H x W x D)	6U controller enclosure: 263.9 mm x 447 mm x 750 mm (10.39 in. x 17.60 in. x 29.53 in.) 2U disk enclosure: 86.1 mm x 447 mm x 490 mm (3.39 in. x 17.60 in. x 19.29 in.) 4U disk enclosure: 175 mm x 447 mm x 490 mm (6.89 in. x 17.60 in. x 19.29 in.) 4U high-density disk enclosure: 175 mm x 447 mm x 790 mm (6.89 in. x 17.60 in. x 31.10 in.)
Weight	6U controller enclosure: ≤ 95 kg (209.48 lb) 2U disk enclosure: ≤ 20 kg (44.10 lb) 4U disk enclosure: ≤ 40 kg (88.20 lb) 4U high-density disk enclosure: ≤ 91 kg (200.66 lb)
Operating Temperature	5°C to 40°C at altitudes below 1,800m (5,905.44 ft.) 5°C to 35°C at altitudes from 1,800m (5,905.44 ft.) to 3,000m (9,842.40 ft.)
Operating Humidity	5% RH to 90% RH

For More Information

To learn more about Huawei storage, please contact the local office or visit Huawei Enterprise website <http://e.huawei.com>.



Huawei Enterprise APP





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