



## Cloud-Oriented Converged Storage

Huawei OceanStor 5300, 5500, 5600, and 5800 V3 mid-range storage systems are next-generation unified storage products specifically designed for enterprise-class 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 V3 mid-range storage systems deliver industry-leading functionality, performance, efficiency, reliability, and ease-of-use.

The V3 mid-range storage systems are ideal for applications such as large-database Online Transaction Processing (OLTP)/Online Analytical Processing (OLAP), file sharing, and cloud computing. Further, these systems offer a wide range of efficient backup and disaster recovery solutions.

With a versatile set of capabilities, the V3 mid-range storage systems 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, 1 TB of cache, and 12 PB of storage capacity.

#### Load balancing

Implements load balancing among controllers and eliminates single points of failure to ensure high system availability and the stability of online services. Multiple controllers concurrently process the same host service to smash the performance bottleneck of a single controller, significantly improving service processing efficiency.

## 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 V3 so that services can be accelerated. OceanStor V3 mid-range 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 systems offer 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.

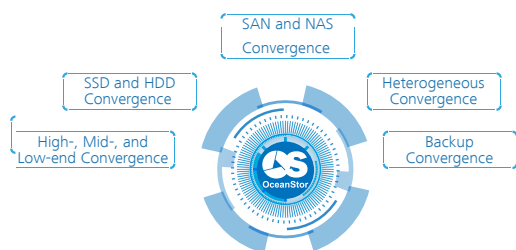
## Intelligence

### Multi-tenant and Service Level Agreement (SLA)

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

### 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.



Innovative convergence technologies



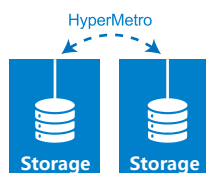
Smart series



Hyper series

### Hyper series data protection suite

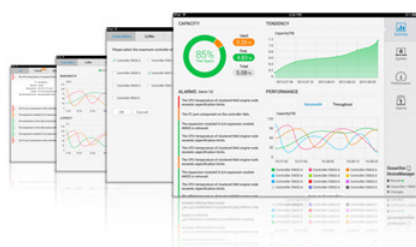
Software for functions such as remote replication, snapshot, and LUN copy provide local, remote, and multi-branch data protection to ensure business continuity and data availability.



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.

### Industry-leading Storage Hardware

#### Outstanding performance

V3 mid-range storage systems employ the latest Intel multi-core processors, 16 Gbit/s Fiber 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 28 GB/s efficiently handles video and other large files, and supports million-level IOPS performance.



SmartIO interface card

#### 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	5300 V3	5500 V3	5600 V3	5800 V3
Controller Enclosure Specifications				
Storage Processors	Multi-core processors			
System Cache (expanded by adding controllers)	32 GB to 256 GB	48 GB to 512 GB	64 GB to 512 GB	128 GB to 1,024 GB
Maximum Number of Controllers	8	8	8	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 supporting 4 x 12 Gbit/s)			
Maximum Number of Hot Swappable I/O Modules per Controller	2	2	8	8
Maximum Number of Front-end Ports per Controller	20	20	28	28
Maximum Number of Disks Supported by Two Controllers	500	750	1,000	1,500
Disk Types	SSD, SAS, NL - SAS			
Gateway Mode	Supported			
Supported RAID Levels	0, 1, 3, 5, 6, 10, and 50			
Maximum Number of Snapshots (LUN)	2,048	4,096	8,192	8,192
Maximum Number of LUNs	4,096	8,192	16,384	16,384
Maximum Number of Snapshots per File System	2,048			
Maximum Capacity of a Single File	256TB			
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) SmartErase (data destruction)			
Storage Management Software	UltraPath (multipathing management)      Cloud Service (remote maintenance and management) BCManager (disaster recovery management software) DeviceManager (manage single device)      eSight (manage multiple devices)			

Virtualization Features		
Heterogeneous Virtualization	Consolidates storage resources of mainstream products to manage and allocate resources 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: 100 V to 240 V DC: 192 V to 288 V or –48 V to –60 V	AC: 200 V to 240 V DC: 192 V to 288 V
Dimensions (H x W x D)	2U controller enclosure: 86.1 mm x 447 mm x 750 mm (3.39 in. x 17.60 in. x 29.53 in.)	3U controller enclosure: 130.5 mm x 447 mm x 750 mm (5.14 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	2U controller enclosure: ≤ 37 kg (81.59 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)	3U controller enclosure: ≤ 50 kg (110.25 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 1,800 m (5,905.44 ft.) 5°C to 35°C at altitudes from 1,800 m (5,905.44 ft.) to 3,000 m (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





Huawei IT



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HUAWEI TECHNOLOGIES CO., LTD.  
Address: Huawei Industrial Base Bantian, Longgang Shenzhen, PRC  
Tel: (0755) 28780808  
Zip code: 518129  
[www.huawei.com](http://www.huawei.com)