# OceanStor 2600 V3 Storage System





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Huawei OceanStor 2600 V3 storage systems are flash-oriented 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 storage systems deliver industry-leading functionality, performance, efficiency, reliability, and ease-of-use.

The V3 storage systems are ideal for applications such as middle-size/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 storage systems can be widely applied in industries ranging from government, finance, telecommunications, to energy.

# **Product Highlights**

# Cloud-Oriented Storage Software

#### **Multiple Controllers**

- Scale-out capability: Allows resources to be linearly expanded online to a maximum of eight controllers and 256 GB of cache.
- 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 SSDs and HDDs: The design purpose-built for all flash

- architecture gives full play to the performance of SSDs and maintains a low latency of 1 ms or less. Combining the advantages of solid-state storage and traditional HDD storage, the systems enable the media performance to reach the full potential in different scenarios.
- 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 2600 V3 so that services can be accelerated.
- 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 primary and backup storage: Integrated backup functions achieve efficiency without additional backup software, simplifying backup management.

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## 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.
- 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.
- 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).

## 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: 2600 V3 storage systems employ the latest multi-core processors, 16 Gbit/s Fiber Channel, and 10 Gbit/s FCoE host ports, PCle 3.0 buses, and 12 Gbit/s SAS 3.0 disk ports, to provide high performance which tops products of the same level.
- 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.

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# **Technical Specifications**

Model	2600 V3
Maximum Number of Controllers	8
System Cache	32 GB to 64 GB
Supported Storage Protocols	Fibre Channel, FCoE, iSCSI, NFS, CIFS, HTTP, and FTP
Front-end Port Types	1/10 Gbit/s Ethernet, 10 Gbit/s FCoE, and 8/16 Gbit/s Fibre Channel
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
Maximum Number of Front-end Ports per Controller	20
Maximum Number of Disks with Dual Controllers	500
Disk Types	SSD, SAS, and NL-SAS
Maximum Raw Capacity with Dual Controllers and All SSDs	1800 TB
Maximum Number of Snapshots (LUN)	2048
Maximum Number of LUNs	4096
Maximum Number of Snapshots per File System	2048
Maximum Capacity of a Single File	256 TB
Data Protection Software	HyperSnap (snapshot), HyperCopy (LUN copy), HyperClone (clone), HyperMirror (volume mirror), HyperReplication (remote replication), HyperLock (WORM), HyperMetro (active-active storage arrays), and HyperVault (integrated backup)
Mission-critical Service Protection	SmartQoS (intelligent QoS control) and SmartPartition (intelligent partitioning)
Resource Efficiency Improvement	SmartTier (intelligent storage tiering), SmartCache (intelligent SSD caching), 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 single device), and eSight (manage multiple devices)
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
Easy Configuration	SmartConfig significantly simplifies configurations for IT maintenance personnel. They can quickly learn how to configure devices and do not need to master professional storage knowledge.
Virtualization Environment	Supports FusionSphere, VMware, XenServer and Hyper-V platforms. Supports value-added features, including VMware VAAI/VASA/SRM and Hyper-V. Supports vSphere and vCenter integration.
Power Supply	AC: 100 V to 240 V (adaptive to high-voltage DC) DC: -48 V to -60 V
Dimensions (H x W x D)	2U controller enclosure: 86.1 mm x 447 mm x 488 mm (3.39 in. x 17.60 in. x 19.21 in.) 2U disk enclosure: 86.1 mm x 447 mm x 490 mm (3.39 in. x 17.60 in. x 19.21 in.) 4U disk enclosure: 175 mm x 447 mm x 490 mm (6.89 in. x 17.60 in. x 19.21 in.)
Weight (Including Disks)	2U controller enclosure: lower than 24 kg (53 lb) 2U disk enclosure: lower than 20 kg (44 lb) 4U disk enclosure: lower than 44 kg (97 lb)
Operating Temperature	-60 to +1800 m height: 5°C to 40°C 1800 m to 3000 m: 1°C lower every time the height increases for 220 m
Operating Humidity	5% RH to 90% RH

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