



OceanStor Dorado 2000 All-Flash Storage System

Fast

50% higher performance than the previous generation

FlashLink® intelligent algorithms

Intelligent

Extensive intelligent software features (Smart series)

3-layer management:

- 365-day capacity trends prediction
- 60-day performance bottleneck prediction
- 14-day disk fault prediction
- Immediate solutions for 93% of problems

Simplified

One device integrates multiple functions for easy management

System configuration success in 3 steps and resource readiness in 5 minutes

A-A architecture for non-disruptive upgrade (NDU) management

Huawei OceanStor Dorado 2000 is an entry-level storage system in the OceanStor Dorado all-flash series. It features an innovative hardware platform, FlashLink® intelligent algorithms, which combines to deliver a 50% higher performance than the previous generation. The intelligent algorithms are built into the storage system to make storage more intelligent during the application operations. Furthermore, the all active-active (A-A) architecture and simplified GUI design help simplify Operations and Maintenance (O&M).

Excelling in scenarios such as virtualization, OA, and branches, Huawei OceanStor Dorado 2000 all-flash storage is trusted option for small and medium-sized businesses (SMBs) in the carrier, finance, government, manufacturing, and other fields. The storage system provides cost-effective services, making it ideal for the IT applications of SMBs.

Product Features

Fast

Innovative hardware platform: The hardware platform of Huawei storage enables E2E data acceleration, improving the system performance by 50% compared to the previous generation.

- ✓ The intelligent multi-protocol interface module hosts the protocol parsing previously performed by the general-purpose CPU, expediting the front-end access performance by 20%.
- ✓ The computing platform offers industry-leading performance with 25% higher computing power than the industry average.
- ✓ The intelligent accelerator module analyzes and understands I/O rules of multiple application models based

on machine learning frameworks to implement intelligent prefetching of memory space. This improves the read cache hit ratio by 50%.

- ✓ The intelligent SSD hosts the core Flash Translation Layer (FTL) algorithm, accelerating data access in SSDs and reducing the write latency by half.
- ✓ The intelligent hardware has a built-in Huawei storage fault library that accelerates component fault location and diagnosis, and shortens the fault recovery time from 2 hours to just 10 minutes.

Intelligent algorithms: Most flash vendors lack E2E innate capabilities to ensure full performance from their SSDs. OceanStor Dorado 2000 runs industry-leading FlashLink® intelligent algorithms based on self-developed controllers, disk enclosures, and operating systems.

- ✓ Many-core balancing algorithm: Taps into the many-core computing power of a controller to maximize the data processing capability.
- ✓ Cache acceleration algorithm: Accelerates batch processing with the intelligent module to bring intelligence to storage systems during application operations.

The data layout between SSDs and controllers is coordinated synchronously.

- ✓ Large-block sequential write algorithm: Aggregates multiple discrete data blocks into a unified big data block for disk flushing, reducing write amplification and ensuring stable performance.
- ✓ Independent metadata partitioning algorithm: Effectively controls the performance compromise caused by garbage collection for stable performance.
- ✓ I/O priority adjustment algorithm: Ensures that read and write I/Os are always prioritized, shortening the access latency.

FlashLink® intelligent algorithms give full play to all flash memory and help Huawei OceanStor Dorado achieve unparalleled performance for a smoother service experience.



Linear increase of performance and capacity: Unpredictable business growth requires storage to provide simple linear increases in performance as more capacity is added to keep up with ever-changing business needs. OceanStor Dorado 2000 supports scale-out of 8 controllers, and IOPS increases linearly as the quantity of controller enclosures increases, matching the performance needs of future business development.

Intelligent

On and off-cloud synergy: Huawei OceanStor Dorado 2000 all-flash system combines general-purpose cloud intelligence with customized edge intelligence over a built-in intelligent hardware platform, providing incremental training and deep learning for a personalized customer experience. The DME IQ intelligent O&M and management platform collects and analyzes over 190,000 device patterns on the live network in real time, extracts general rules, and enhances basic O&M.

Intelligence throughout service lifecycle: Intelligent management covers resource planning, provisioning, system tuning, risk prediction, and fault location, and enables 60-day and 14-day predictions of performance bottlenecks and disk faults respectively, and immediate solutions for 93% of problems detected.

Extensive intelligent software features: Thin provisioning and data reduction improve space utilization; intelligent QoS improves service quality; and intelligent heterogeneous virtualization and data migration combine to ensure simplified system lifecycle management.

Simplified

Simple management*:

OceanStor Dorado 2000 delivers SAN service. The convergence of cross-generation devices allows for joint resource usage. As such, multiple functions are converged to simplify management and greatly reduce the TCO.

Simple configuration: A brand-new graphical user interface (GUI) greatly simplifies the configuration process of traditional storage. This facilitates storage system configuration in just three steps and resource readiness in just five minutes, without assistance from dedicated personnel. This meets the key requirements of SMBs for simple and easy-to-use IT systems.

Simple O&M: The active-active architecture ensures there is no LUN ownership, meaning a LUN does not belong to any specific controller. In addition, load balancing and non-disruptive upgrade (NDU) are supported. O&M personnel do not need to prepare much on the host side before an upgrade, greatly improving O&M efficiency.

Technical Specifications

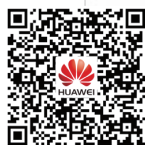
Model	OceanStor Dorado 2000		
Hardware Specifications			
Maximum Number of Controllers	8		
Maximum Cache (Dual Controllers, Expanding with the Number of Controllers)	128GB-512GB		
Supported Storage Protocols	FC, iSCSI		
Front-End Port Types	8/16/32 Gbit/s FC, 1/10/25 GbE		
Back-End Port Types	SAS 3.0		
Maximum Number of Hot-Swappable I/O Modules per Controller Enclosure	4		
Maximum Number of Front-End Ports per Controller Enclosure	28		
Maximum Number of SSDs	400		
SSDs	960 GB/1.92 TB/3.84 TB/7.68 TB/15.36 TB SAS SSD		
Software Specifications			
Supported RAID Levels	RAID 5, RAID 6 and RAID-TP (tolerates simultaneous failures of 3 SSDs)		
Number of LUNs	2,048		
Value-Added Features	SmartCompression, SmartThin, SmartQoS, HyperSnap, HyperReplication, HyperClone, HyperEncryption, SmartErase, HyperMetro, HyperCDP		
Storage Management Software	DeviceManager	UltraPath	DME IQ
Physical Specifications			
Power Supply	Controller enclosure: 200V-240V AC ± 10%, 192V-288V DC Disk enclosure: 100V-240V AC ± 10%, 192V-288V DC		
Dimensions (H x W x D)	SAS SSD enclosure: 86.1 mm × 447 mm × 410 mm		
Weight	SAS controller enclosure: ≤ 30 kg SAS SSD enclosure: ≤ 20 kg		
Operating Temperature	-60 m to +1800 m altitude: 5° C to 35° C (bay) or 40° C (enclosure) 1800 m to 3000 m altitude: The max. temperature threshold decreases by 1° C for every altitude increase of 220 m		
Operating Humidity	10% RH to 90% RH		

*For further details on specifications with an asterisk for a specific project, please contact Huawei sales.

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



Huawei Enterprise APP





Huawei IT



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