

OceanStor Dorado2100 G2 Solid State Storage System



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The Huawei OceanStor Dorado2100 G2 (Dorado2100 G2) is a Storage Area Network (SAN)-based, solid state storage product designed for the enterprise-level, high-performance storage market. The Dorado2100 G2 features full-SSD architecture and employs advanced cache management and I/O scheduling mechanisms. It offers an ideal choice for performance-demanding storage scenarios such as databases, Virtual Desktop Infrastructure (VDI), and high-performance computing.

Highlights

Outstanding Performance

- **High IOPS:** the Dorado2100 G2 delivers performance of up to 600,000 Input/Output Operations per Second (IOPS), equivalent to the performance of a traditional disk array consisting of 1,500 15k RPM SAS disks.
- **Excellent responsiveness:** access latency as low as 500 μ s is only 5% that of traditional disk arrays.

Reliability

- **Dual-controller architecture:** active-active dual controllers implement redundancy and load balancing, ensuring high service reliability.
- **Component redundancy design:** redundant power supplies, fans, controllers, interface modules, SSDs, and Backup Battery Units (BBUs) eliminate single points of failure while supporting hot swaps and online I/O expansion.
- **Media protection:** wear leveling, bad-block repair, and random scrambling code technologies can dramatically prolong storage media service life with a Mean Time Between Failure (MTBF) greater than one million hours.
- **System protection:** the Dorado2100 G2 supports RAID 0, 5, and 10; global hot spare disks; and data pre-copy for faulty disks.

Economy and Efficiency

- **Low power consumption:** the typical 580W system power consumption saves up to 90% of power compared with traditional, performance-equivalent disk arrays.
- **Small footprint:** compared with traditional disk arrays, the Dorado2100 G2 saves 95% of cabinet footprint but has the same performance, dramatically reducing cabinet purchasing costs.
- **Intelligent thin provisioning:** automatic capacity expansion improves disk utilization and implements on-demand disk purchasing, reducing the initial purchase cost.

Ease of Use

- **Simplified management:** user-friendly management and maintenance mechanisms support GUI and CLI modes and provide alarm notification by sound, short message, and email.
- **Intelligent service life monitoring for SSDs:** the Dorado2100 G2 constantly monitors the operating status of SSDs and notifies exceptions detected in real time, helping ensure application reliability.
- **Easy deployment:** the Dorado2100 G2 uses a standard SAN form without changing existing IT architecture, and protects users' original investment.

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Product Specifications

Model	Dorado2100 G2
Hardware Specifications	
Number of controllers	2
Controller working mode	Active-Active
Front-end host port	8 Gbit/s Fibre Channel/10 Gbit/s iSCSI (ToE)/ 40 Gbit/s InfiniBand QDR
Number of onboard I/O ports	8 x 8 Gbit/s Fibre Channel
Supported maximum number of I/O modules	2
Expansion I/O module	4 x 8 Gbit/s Fibre Channel/4 x 10 Gbit/s iSCSI (ToE)/ 2 x 40 Gbit/s InfiniBand QDR
SSD Type	SLC: 100G/200G eMLC: 200G/400G
Supported maximum number of expansion disk enclosures	3
Performance	
Bandwidth	10 GB/s
IOPS	600,000
Access latency	500 µs
Software Features	
RAID Level	0, 5, 10
Maximum number of hosts	512
Maximum number of LUNs	2,048
Multi-pathing software	UltraPath
Physical Specifications	
Power supply	AC: 100V to 127V or 200V to 240V
Typical power consumption	2U controller enclosure: 580W 2U disk enclosure: 295W
Dimensions (H x W x D)	2U controller enclosure: 86.1 mm x 446 mm x 582 mm (3.39 in. x 17.56 in. x 22.91 in.) 2U disk enclosure: 86.1 mm x 446 mm x 412 mm (3.39 in. x 17.56 in. x 16.22 in.)
Weight	2U controller enclosure: 32.5 kg (with 25 HSSDs) 2U disk enclosure: 24.5 kg (with 25 HSSDs)
Operating ambient temperature	5°C to 40°C at an attitude lower than 1,800m 5°C to 30°C at an altitude between 1,800m and 3,000m
Operating ambient humidity	5% RH to 95% RH

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