

Huawei Enterprise-Grade SAS SSDs Data Sheet

Huawei enterprise-grade SAS SSDs are next-generation solid state disks presented by Huawei. They deliver better performance, higher reliability, and easier management, and are the preferred storage media for eliminating system I/O bottlenecks, enhancing system efficiency, and improving service performance. Designed for enterprise-grade applications that require high performance, Huawei SSDs are suitable for scenarios like database, virtualization, and VDI.

Features

Excellent Performance

- **Short latency:** Achieves an average read and write latency of 135 µs/40 µs, and quickly responds to user requests to meet requirements for latency-sensitive services.
- **High throughput:** Achieves up to 400,000/100,000 random read/write IOPS and meets requirements for high-performance storage systems.
- **Fast read/write speed:** Obtains a maximum of 2,200/1,600 MB/s of read/write bandwidth while ensuring a stable performance.

Solid Reliability

- **Long service life:** Employs dynamic and static wear-leveling algorithms and bad block management mechanism to greatly prolong the service life, with a mean time between failures (MTBF) of more than 3 million hours.
- **RAID protection:** Uses dedicated chips within SSDs for RAID protection, and ensures no data loss in the event of a single flash chip failure.
- **Power-off protection:** Designs power-off protection to prevent data loss in the event of power failure.

Ease of Managemen

- **Health check:** Monitors SSD running status in real time to prevent failures.
- **Adjustable power consumption:** Adopts intelligent power supply to adjust SSD power consumption for different scenarios.
- **Integrated tools:** Uses integrated tools to manage the SSDs intelligently for less customer investment in management.

Application Scenarios

- **Database:** Accelerates the concurrent processing of databases with Huawei SSDs.
- **Virtualization:** Improves system performance and shortens latency with Huawei SSDs.
- **VDI:** Avoids VDI boot storms with Huawei SSDs.

Technical Specifications

Type	Huawei Enterprise-Grade SAS SSDs				
Specifications					
Interface Protocols	SAS 3.0 and SAS 12 Gbit/s				
Model	960GB	1,920 GB	3,840GB	7,680GB	15,360GB
Capacity (Also for Users)	Up to 1.752PB	Up to 3.504PB	Up to 7.008PB	Up to 14.016PB	Up to 28.032PB
Port Type	Dual-port				
Flash Chip Type	TLC				
Dimension	14.7 x 69.85 x 100.2 (mm)				
Weight	<= 350g				
Performance					
Average Read Latency (4 KB, QD1)	135µs				
Average Write Latency (4 KB, QD1)	40µs				
Sequential Read Bandw -idth (128 KB, QD32)	2,200 MBps	2,200 MBps	2,200 MBps	2,200 MBps	2,200 MBps
Sequential Write Bandw -idth (128 KB, QD32)	900 MBps	1,600 MBps	1,600 MBps	1,600 MBps	1,550 MBps
Random Read IOPS (4 KB, QD128)	335K	400K	400K	400K	400K
Random Write IOPS (4 KB, QD32, 7:3)	38K	75K	100K	80K	60K
Mixed IOPS (4 KB, QD32, R/W: 7/3)	81K	165K	240K	255K	180K
Power Supply					
Operating Voltage	12V ± 10%				
Power Consumption (Typical)	5 W	5 W	5.5 W	6 W	7 W
Environment					
Temperature	Operating temperature (case temperature): 0°C to 70°C Non-operating temperature: -40°C to +85°C If the altitude is > 1,800 m: The operating temperature decreases by 1°C as the altitude increases by 220 m				
Humidity	Operating humidity: 5% RH to 95% RH (non-condensing) Storage humidity: 5% RH to 95% RH (non-condensing)				
Altitude	Operating altitude: -305 m to +5,486 m Storage altitude: -305 m to +12,192 m				
Reliability					
Hot Swapping	Supported				
TRIM	Supported				
MTBF	3 million hours				

For More Information

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

Huawei Enterprise APP

Huawei IT

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