Huawei Enterprise-Grade NVMe SSDs Data Sheet (for Huawei OceanStor Dorado)



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Huawei enterprise-grade NVMe 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 ultra-high performance and are extremely sensitive to latency, Huawei SSDs are suitable for scenarios like database, virtualization, and VDI.

Features

Excellent Performance

· **Short latency:** Achieves an average read and write latency of 100 µs/20 µs with NVMe protocol, and quickly responds to user requests to meet requirements for latency-sensitive services.

· **High throughput:** Achieves up to 470,000/125,000 random read/write IOPS with NVMe. The NVMe multi-channel technology can meet requirements for high-performance storage systems.

· **Fast read/write speed:** Obtains a maximum of 2,900/2,200 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 2.5 million hours.

· **RAID protection:** Uses dedicated hardware 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 Management

· **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 NVMe SSDs		
Specifications			
Model*	HSSD-D7294DL1T9N	HSSD-D7294DL3T8N	HSSD-D7294DL7T6N
Capacity (Also for Users)	1,920 GB	3,840 GB	7,680 GB
Endurance Rating (Lifetime Writes)	Up to 3.504PB	Up to 7.008PB	Up to 14.016PB
Interface Protocols	PCIe 4.0		
Command Set	NVMe 1.4		
Port Type	Dual-port		
Flash Chip Type	TLC		
Dimension	9.5 x 79.8 x 160 (mm)		
Weight	<= 350g		
Performance			
Average Read Latency (4 KB, QD1)	100 µs	100 µs	102 µs
Average Write Latency (4 KB, QD1)	25 µs	20 µs	25 µs
Sequential Read Band -width (128 KB, QD64)	2,900 MBps	2,850 MBps	2,800 MBps
Sequential Write Band -width (128 KB, QD64)	2,200 MBps	2,200 MBps	2,200 MBps
Random Read IOPS (4 KB, QD64)	470K	470K	460K
Random Write IOPS (4 KB, QD32)	125K	115K	110K
Mixed IOPS (4 KB, QD64, R/W: 7/3)	260K	250K	240K
Power Supply			
Operating Voltage	12V ± 10%		
Power Consumption (Typical)	8~14 W	8~14 W	8~14 W
Environment			
Temperature	•Drive SMART temperature: 0°C to 78°C (32°F to 172.4°F) •Storage temperature: –40°C to +85°C (–40°F to +185°F) •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		

* The actual product models may be different, but the specifications are the same.

Reliability	
Hot Swapping	Supported
TRIM	Supported
MTBF	2.5 million hours

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

Huawei Enterprise APP

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