



DC2000B PCIe 4.0 NVMe M.2 SSD

Enterprise class for server applications

Kingston DC2000B is a high-performance PCIe 4.0 NVMe M.2 SSD that uses the latest Gen 4x4 PCIe interface with 112-layer 3D TLC NAND. Ideally suited for use in high-volume rack-mount servers as an internal boot drive(s) to preserve valuable front-loading drive bays, as well as for use in purpose-built systems where a high-performance M.2 SSD is needed that includes hardware-based on-board power loss protection (PLP). New for DC2000B is an integrated aluminium heatsink that offers broader thermal compatibility for a wide range of systems. DC2000B delivers low latency and excellent IO consistency to handle various workloads from boot drive applications to high-speed application caching. DC2000B is rated at 0.4 DWPD write endurance and carries a five-year warranty.

- PCIe 4.0 NVMe Gen 4x4 performance
- Hardware-based power loss protection
- Latency and IOPS consistency
- Designed for data center environments

Key Features

- PCIe 4.0 NVMe performance**
 Utilises PCIe Gen 4x4 lanes for high-performance speeds.
- On-board power loss protection (PLP)**
 Reduce the possibility of data loss and/or corruption due to unexpected power-off.
- Low latency and IOPS consistency**
 Firmware optimised to deliver low latency and IO consistency for high duty cycle workloads.
- Designed for data center environments**
 Optimised to meet the demands of server boot applications with low latency and IO consistency as the key design criteria.

Specifications

Form factor	M.2 2280
Interface	PCIe 4.0 x4 NVMe
Capacities ¹	240GB, 480GB, 960GB
NAND	3D TLC
Sequential read/write	240GB – 4500/400 MBs 480GB – 7000/800 MBs 960GB – 7000/1300 MBs
Steady-state 4k read/write ²	240GB – 260000/18000 IOPS 480GB – 530000/32000 IOPS 960GB – 540000/47000 IOPS
Total bytes written (TBW) ³	240GB – 175 TBW 480GB – 350 TBW 960GB – 700 TBW

Latency read (avg)	240GB-960GB: 70µs
Latency write (avg)	240GB – 53µs 480GB – 29µs 960GB – 20µs
Power loss protection (power caps)	Yes
Enterprise SMART tools	Reliability tracking, usage statistics, SSD life remaining, wear levelling, temperature
Endurance	240GB — (0.4 DWPD/5yrs) ⁴ 480GB — (0.4 DWPD/5yrs) ⁴ 960GB — (0.4 DWPD/5yrs) ⁴
Power consumption	240GB: Average read: 2.97W Average write: 4.02W Max read: 3.01W Max write: 4.09W 480GB: Average read: 3.22W Average write: 5.60W Max read: 3.29W Max write: 5.77W 960GB: Average read: 3.26W Average write: 7.36W Max read: 3.36W Max write: 7.80W
Storage temperature	-40°C ~ 85°C
Operating temperature	0°C ~ 70°C
Dimensions	80mm x 22mm x 8.3mm
Weight	240GB – 9g 480GB – 10g 960GB – 11g
Vibration non-operating	20G peak (10-2,000Hz)

MTBF	2 million hours
Warranty/support ⁵	Limited five-year warranty with free technical support

Part Numbers

SEDC2000BM8

SEDC2000BM8/240G
SEDC2000BM8/480G
SEDC2000BM8/960G

Product Image



1. Some of the listed capacity on a Flash storage device is used for formatting and other functions and thus is not available for data storage. As such, the actual available capacity for data storage is less than what is listed on the product. For more information go to Kingston's [Flash Memory Guide](#).
2. Measurement taken once the workload has reached steady state but including all background activities required for normal operation and data reliability.
3. [Total Bytes Written](#) (TBW) is derived from the JEDEC Client Workload (JESD219A).
4. Drives Writes Per Day (DWPD) derived from the JEDEC Enterprise Workload (JESD219A).
5. Limited warranty based on 5 years or "Percentage Used" which can be found using the Kingston SSD Manager (kingston.com/ssdmanager). For NVMe SSDs, a new unused product will show a Percentage Used value of 0, whereas a product that reaches its warranty limit will show a Percentage Used value of greater than or equal to one hundred (100). See kingston.com/wa for details.



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