

DC2000B PCIe 4.0 NVMe M.2 SSD



Enterprise class for server applications

Kingston's DC2000B SSD is a high-performance boot drive designed for data centers using the latest Gen 4x4 PCIe interface with 3D TLC NAND. With low latency, IOPS consistency and hardware-based power loss protection, it ensures reliability and efficiency. Available in capacities of up to 960GB, it's ideal for enterprise server boot and caching applications.

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

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	Heatsink: 80mm x 22mm x 8.3mm Non-heatsink 80mm x 22mm x 3.5mm
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 Heatsink

SEDC2000BM8/240G

SEDC2000BM8/480G

SEDC2000BM8/960G

Part Numbers Non-Heatsink

SEDC2000BYM8/240G

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.



THIS DOCUMENT SUBJECT TO CHANGE WITHOUT NOTICE.

©2025 Kingston Technology Europe Co LLP and Kingston Digital Europe Co LLP, Kingston Court, Brooklands Close, Sunbury-on-Thames, Middlesex, TW16 7EP, England. Tel: +44 (0) 1932 738888 Fax: +44 (0) 1932 785469 All rights reserved. All trademarks and registered trademarks are the property of their respective owners. MKD-05222025