

KC2500 NVMe PCIe SSD

FEATURES/BENEFITS

- > **NVMe PCIe performance** — Using the latest Gen 3.0 x 4 controller, reach speeds of up to 3,200/2,200MB/s¹.
- > **Full-security suite** — Protect and secure your data with Kingston's self-encrypting drive.
- > **Optimal systems** — Ideal for desktop, workstation and high-performance computing (HPC) systems.
- > **Multiple capacities** — Upgrade your PC with capacities of up to 2TB².

SPECIFICATIONS

- > **Form Factor** M.2 2280
- > **Interface** NVMe™ PCIe Gen 3.0 x 4 Lanes
- > **Capacities**² 250GB, 500GB, 1TB, 2TB
- > **Controller** SMI 2262EN
- > **NAND** 96-layer 3D TLC
- > **Encrypted** XTS-AES 256 bit
- > **Sequential Read/Write**¹
 - 250GB — up to 3,500/1,200MB/s
 - 500GB — up to 3,500/2,500MB/s
 - 1TB — up to 3,500/2,900MB/s
 - 2TB — up to 3,500/2,900MB/s
- > **Random Read/Write**¹
 - 250GB — up to 375,000/300,000 IOPS
 - 500GB — up to 375,000/300,000 IOPS
 - 1TB — up to 375,000/300,000 IOPS
 - 2TB — up to 375,000/300,000 IOPS
- > **Total Bytes Written (TBW)**³
 - 250GB — 150TBW
 - 500GB — 300TBW
 - 1TB — 600TBW
 - 2TB — 1.2PBW
- > **Power Consumption** .003W Idle / .2W Avg / 2.1 (MAX) Read / 7W (MAX) Write
- > **Storage Temperature** -40°C to 85°C
- > **Operating Temperature** 0°C to 70°C
- > **Dimensions** 80mm x 22mm x 3.5mm
- > **Weight**
 - 250GB — 8g
 - 500GB — 10g
 - 1TB — 10g
 - 2TB — 11g
- > **Vibration operating** 2.17G Peak (7-800Hz)
- > **Vibration non-operating** 20G Peak (20-1000Hz)
- > **MTBF** 2,000,000 hours
- > **Warranty/support**⁴ Limited 5-year warranty with free technical support



PART NUMBERS

- SKC2500M8/250G
- SKC2500M8/500G
- SKC2500M8/1000G
- SKC2500M8/2000G



The cryptographic functionalities, mentioned in the present section, are implemented in the firmware of the product. The cryptographic functions of the firmware can only be changed during the manufacturing process and cannot be changed by a regular user. The product is designed for installation by the user by following the step-by-step instruction from the installation user guide, supplied with the product, and, thereby, can be used without further substantial support of the supplier.

¹ Based on "out-of-box performance" using a SATA Rev. 3.0 motherboard. Speed may vary due to host hardware, software and usage. IOMETER Random 4k Random Read/Write is based on 8GB partition.
² 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 products. For more information, go to Kingston's Flash memory Guide at kingston.com/flashguide.

³ Total Bytes Written (TBW) is derived from the JEDEC Client Workload (JESD219A).

⁴ 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.

