

A2000 NVMe PCIe SSD

kingston.com/flashguide

Uncompromising performance, amazing value

Kingston's A2000 NVMe PCIe SSD is an affordable storage solution with impressive performance of read/write speeds up to 2,200/2,000MB/s¹, A2000 delivers 3x the performance over a SATA SSD with quicker loading times, lower power and lower heat. A2000 SSD is designed for the entry-level user, purpose-built system manufacturer, DIY system builder, and those seeking to upgrade their PC. With a single-sided slim M.2 design, A2000 works to its full potential when installed in an Ultrabook or a small form factor PC (SFF PC) system.

Available in capacities from 250GB–1TB² to meet your system's needs. A2000 is a self-encrypting drive that supports end-to-end data protection using 256-bit XTS-AES Hardware-based encryption and allows the usage of independent software vendors with TCG Opal 2.0 security management solutions such as Symantec™, McAfee™, WinMagic® and others. A2000 also has built-in eDrive support, a security storage specification for use with BitLocker.

- › NVMe PCIe performance at a fraction of the cost
- › Supports a full-security suite (TCG Opal, XTS-AES 256-bit, eDrive)
- › Ideal for Ultrabooks and small form factor PC (SFF PC) systems
- › Upgrade your PC with up to 1TB²



Features/specs on reverse >>



A2000 NVMe PCIe SSD

FEATURES/ BENEFITS

- > **NVMe PCIe performance at a fraction of the cost** — A2000 is an affordable solution with impressive read/write speeds up to 2,200/2,000MB/s¹.
- > **Full-security suite** — Protect and secure your data with Kingston's self-encrypting drive.
- > **Optimal systems** — Ideal for Ultrabooks and small form factor PC (SFF PC) systems.
- > **Multiple capacities** — Upgrade your PC with up to 1TB².

SPECIFICATIONS

- > **Form factor** M.2 2280
- > **Interface** NVMe™ PCIe Gen 3.0 x 4 lanes
- > **Capacities²** 250GB, 500GB, 1TB
- > **NAND** 3D TLC
- > **Encrypted** XTS-AES 256-bit encryption
- > **Sequential read/write¹**
 - 250GB – up to 2,000/1,100MB/s
 - 500GB – up to 2,200/2,000MB/s
 - 1TB – up to 2,200/2,000MB/s
- > **Random 4K read/write¹**
 - 250GB – up to 150,000/180,000 IOPS
 - 500GB – up to 180,000/200,000 IOPS
 - 1TB – up to 250,000/220,000 IOPS
- > **Total Bytes Written (TBW)³**
 - 250GB – 150TBW
 - 500GB – 350TBW
 - 1TB – 600TBW
- > **Power consumption**
 - .0032W idle / .08W avg / 1.7W (MAX) read / 4.5W (MAX) write
- > **Storage temperature** -40°C~85°C
- > **Operating temperature** 0°C~70°C
- > **Dimensions** 80mm x 22mm x 3.5mm
- > **Weight**
 - 250GB – 6.6g
 - 500GB – 6.8g
 - 1TB – 6.6g
- > **Vibration operating** 2.17G peak (7-800Hz)
- > **Vibration non-operating** 20G peak (20-1000Hz)
- > **MTBF** 2,000,000
- > **Warranty/Support⁴**
 - limited 5-year warranty with free technical support



PART NUMBERS

- SA2000M8/250G
- SA2000M8/500G
- SA2000M8/1000G

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.

The SSD is designed for use in desktop and notebook computer workloads and is not intended for Server environments.

- Based on "out-of-box performance" using a PCIe 3.0 motherboard. Speed may vary due to host hardware, software, and usage. IOMETER Random 4K Read/Write is based on 8GB partition.
- 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.
- Total Bytes Written (TBW) is derived from the JEDEC Client Workload (JESD219A).
- 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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