



# A1000 SSD

## FEATURES/ BENEFITS

- > **20X faster than a hard drive<sup>1</sup>** — With incredible read/write speeds the A1000 will not only increase performance but can also be used to breathe new life into older systems.
- > **M.2 2280 Form Factor** — Multi-purpose SFF connector replaces small mSATA and mini-PCIe slots.
- > **Single-sided design** — Integrates easily into designs with M.2 connectors; ideal for thin and light notebooks and in systems with limited space.
- > **Multiple capacities** — Available in a range of capacities up to 960GB<sup>2</sup> to meet your data storage requirements.

## SPECIFICATIONS

- > **Form Factor:** M.2 2280
- > **Interface:** PCIe NVMe™ Gen 3.0 x 2 Lanes
- > **Capacities<sup>2</sup>:** 240GB, 480GB, 960GB
- > **Controller:** Phison E8
- > **NAND:** 3D TLC
- > **Sequential Read/Write<sup>1</sup>:**
  - 240GB — up to 1,500/800MB/s
  - 480GB — up to 1,500/900MB/s
  - 960GB — up to 1,500/1,000MB/s
- > **Random 4K Read/Write:**
  - 240GB — up to 100,000/80,000 IOPS
  - 480GB — up to 100,000/90,000 IOPS
  - 960GB — up to 120,000/100,000 IOPS
- > **Power Consumption:** 0.011748W Idle / 0.075623W Avg / 0.458W (MAX) Read / 0.908W (MAX) Write
- > **Dimensions:** 80mm x 22mm x 3.5mm
- > **Operating Temperature:** 0°C to 70°C
- > **Storage Temperature:** -40°C to 85°C
- > **Weight:**
  - 240GB — 6.4g
  - 480GB — 7g
  - 960GB — 7.6g
- > **Vibration Operating:** 2.17G Peak (7–800Hz)
- > **Vibration Non-operating:** 20G Peak (10–2000Hz)
- > **Life Expectancy:** 1 million hours MTBF
- > **Warranty/support<sup>3</sup>:** Limited 5-year warranty with free technical support
- > **Total Bytes Written (TBW)<sup>4</sup>:**
  - 240GB — 150TB
  - 480GB — 300TB
  - 960GB — 600TB



## PART NUMBERS

SA1000M8/240G  
SA1000M8/480G  
SA1000M8/960G

## PACKAGE CONTENTS

M.2 SSD  
Hard Drive Cloning Software – Download Coupon<sup>5</sup>

This SSD is designed for use in desktop and notebook computer workloads and is not intended for server environments.

- <sup>1</sup> Based on "out-of-box performance" using a SATA Rev 3.0 / PCIe 3.0 motherboard. Speed may vary due to host hardware, software, and usage. IOMETER Random 4K Read/Write is based on 8GB partition.
- <sup>2</sup> 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 Guide at [kingston.com/flashguide](http://kingston.com/flashguide).
- <sup>3</sup> Limited warranty based on 5 years or "SSD Life Remaining" which can be found using the Kingston SSD Manager ([Kingston.com/SSDManager](http://Kingston.com/SSDManager)). A new, unused product will show a wear indicator value of one hundred (100), whereas a product that has reached its endurance limit of program erase cycles will show a wear indicator value of one (1). See [Kingston.com/wa](http://Kingston.com/wa) for details.
- <sup>4</sup> Total Bytes Written (TBW) is derived from the JEDEC Client Workload (JESD219A).
- <sup>5</sup> Operating system software support: Windows® 10, 8.1, 8.



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