

# **Q500 SSD** Incredible speeds plus rock-solid reliability.

Kingston's Q500 solid-state drive dramatically improves the responsiveness of your existing system with incredible boot, loading, and transfer times compared to mechanical hard drives. Powered by a latest-gen controller for read and write speeds up to 500MB/s and 450MB/s<sup>1</sup>, this SSD is 10x faster than a traditional hard drive<sup>1</sup> for higher performance, ultra-responsive multi-tasking, and an overall faster system.

Also more reliable and durable than a hard drive, Q500 is built with Flash memory. There are no moving parts, making it less likely to fail than a mechanical hard drive. It's also cooler and quieter, and its shock and vibration resistance makes it ideal for notebooks and other mobile computing devices.

Q500 is available in multiple capacities from 120GB–1.92TB<sup>2</sup> to give you all the space you need for applications, videos, photos and other important documents. You can also replace your hard drive or a smaller SSD with a drive big enough to hold all your files.

- Fast start-up, loading, and file transfers
- More reliable and durable than a hard drive
- Multiple capacities with space for applications or a hard drive replacement

## **FEATURES / BENEFITS**

**10x faster than a hard drive**<sup>1</sup> — With incredible read/ write speeds the Q500 SSD will not only increase performance but can also be used to breathe new life into older systems.

**Rugged** — Q500 is shock- and vibration-resistant for rugged reliability when used in notebooks and other mobile computing devices.

## SPECIFICATIONS

Form factor 2.5" Interface SATA Rev. 3.0 (6Gb/s)

Capacities<sup>2</sup> 120GB, 240GB, 480GB, 960GB, 1.92TB

#### Baseline Performance<sup>1</sup> Data Transfer (ATTO)

120GB — up to 500MB/s Read and 320MB/s Write 240GB — up to 500MB/s Read and 350MB/s Write 480GB — up to 500MB/s Read and 450MB/s Write 960GB — up to 500MB/s Read and 450MB/s Write 1.92TB — up to 500MB/s Read and 450MB/s Write

#### **Power Consumption**

0.195W Idle / 0.279W Avg / 0.642W (MAX) Read / 1.535W (MAX) Write

Storage temperature -40°C~85°C

**Operating temperature**  $0^{\circ}C \sim 70^{\circ}C$ 

**Dimensions** 100.0mm x 69.9mm x 7.0mm

Weight 41g

**Vibration operating** 2.17G Peak (7–800Hz)

Vibration non-operating 20G Peak (10–2000Hz)

Life expectancy 1 million hours MTBF

Warranty/support<sup>4</sup> Limited 3-year warranty with free technical support **Multiple capacities** — Available in 120GB, 240GB, 480GB, 960GB and 1.92TB capacities, Q500 is designed to suit anyone's needs.

**Ideal for desktops and notebooks** — Q500 has a 7mm form factor to fit in a wider array of systems. It's ideal for slimmer notebooks and in systems with limited available space.

### Total Bytes Written (TBW)<sup>5</sup>

120GB — 40TB 240GB — 80TB 480GB — 160TB 960GB — 300TB 1.92TB — 600TB



## PART NUMBERS

Stand-alone 2.5" drive
SQ500S37/120G
SQ500S37/240G
SQ500S37/480G
SQ500S37/960G
SQ500S37/1920G

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

- 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 Controller model may vary.
- 4 Limited warranty based on 3 years or "SSD Life Remaining" which can be found using the Kingston SSD Manager (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 for details.
- 5 Total Bytes Written (TBW) is derived from the JEDEC Client Workload (JESD219A).



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