

# UV500 SSD

kingston.com/ssd

## An encrypted solution for every user.

Kingston's UV500 family of solid-state drives dramatically improves the responsiveness of your existing system with incredible boot, loading and transfer times compared to mechanical hard drives. Powered by a Marvell Dean controller combined with 3D NAND Flash for read and write speeds up to 520MB/s and 500MB/s<sup>1</sup>, this SSD is 10X faster than a traditional hard drive for better performance, ultra-responsive multi-tasking and an overall faster system. UV500 provides end-to-end data protection, supports 256-bit AES hardware-based encryption and TCG Opal 2.0 security management solutions.

More reliable and durable than a hard drive, UV500 is built with NAND Flash semiconductor memory. There are no moving parts, making it far less likely to fail than a mechanical hard drive. It is also cooler and quieter, and its shock and vibration resistance makes it ideal for notebooks and other mobile computing devices.

UV500 is available in multiple capacities from 120GB–960GB,<sup>2</sup> so you can buy one to use as a boot drive, or take advantage of the larger capacities to store videos, photos and host your most frequently used applications.

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- › 10X faster than a 7200RPM hard drive <sup>1</sup>
  - › AES 256-bit Hardware Encryption  
Self-Encrypting Drive (SED) and TCG Opal 2.0
  - › Available in multiple form factors  
(2.5"/M.2/mSATA)
  - › Multiple capacities up to 960GB<sup>2</sup>



Features/specs on reverse >>

 **Kingston**<sup>®</sup>  
TECHNOLOGY

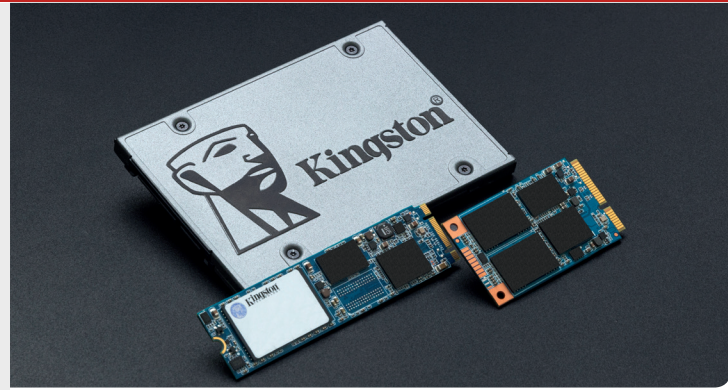
# UV500 SSD

## FEATURES/BENEFITS

- > **Ideal for desktops and notebooks** — Comes in multiple form factors (2.5"/M.2/mSATA) to fit in a wider array of systems. It is ideal for slimmer notebooks and systems with limited space.
- > **Multiple capacities** — Available in a range of capacities up to 960GB<sup>2</sup> to meet your data storage requirements.
- > **Encrypted protection** — Protect sensitive data with support for 256-bit AES hardware-based encryption and TCG Opal 2.0.
- > **10X faster than a hard drive<sup>1</sup>** — With incredible read/write speeds, the UV500 will not only increase performance, but can also breathe new life into older systems.

## SPECIFICATIONS

- > **Form factor** 2.5"/M.2 2280/mSATA
- > **Interface** SATA Rev. 3.0 (6Gb/s) – with backwards compatibility to SATA Rev. 2.0 (3Gb/s)
- > **Capacities<sup>2</sup>** 120GB, 240GB, 480GB, 960GB
- > **Controller** Marvell Dean Controller
- > **NAND** 3D TLC
- > **Encryption** encryption support (AES 256-bit)
- > **Sequential Read/Write<sup>1</sup>**
  - 120GB — up to 520/320MB/s
  - 240GB — up to 520/500MB/s
  - 480GB — up to 520/500MB/s
  - 960GB — up to 520/500MB/s
- > **Maximum 4K Read/Write<sup>1</sup>**
  - 120GB — up to 79,000/18,000 IOPS
  - 240GB — up to 79,000/25,000 IOPS
  - 480GB — up to 79,000/35,000 IOPS
  - 960GB — up to 79,000/45,000 IOPS
- > **Power Consumption**  
0.195W idle / 0.5W avg / 1.17W (MAX) read / 2.32 W (MAX) write
- > **Dimensions**
  - 100.1mm x 69.85mm x 7mm (2.5")
  - 80mm x 22mm x 3.5mm (M.2)
  - 50.8mm x 29.85mm x 4.85mm (mSATA)
- > **Operating temperatures** 0°C~70°C
- > **Storage temperatures** -40°C~85°C
- > **Weight**
  - 120GB–480GB — 41g (2.5")
  - 960GB — 57g (2.5")
  - 120GB — 6.6g (M.2)
  - 240GB — 6.7g (M.2)
  - 480GB — 7.7g (M.2)
  - 120GB — 6.2g (mSATA)
  - 240GB–480GB — 6.7g (mSATA)
- > **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>**
  - 120GB — 60TB
  - 240GB — 100TB
  - 480GB — 200TB
  - 960GB — 480TB



## KINGSTON PART NUMBERS

- SUV500/120G Stand-alone drive
- SUV500/240G Stand-alone drive
- SUV500/480G Stand-alone drive
- SUV500/960G Stand-alone drive
- SUV500B/120G Desktop/Notebook upgrade kit
- SUV500B/240G Desktop/Notebook upgrade kit
- SUV500B/480G Desktop/Notebook upgrade kit
- SUV500B/960G Desktop/Notebook upgrade kit
- SUV500M8/120G M.2
- SUV500M8/240G M.2
- SUV500M8/480G M.2
- SUV500MS/120G mSATA
- SUV500MS/240G mSATA
- SUV500MS/480G mSATA

## DESKTOP/NOTEBOOK UPGRADE KIT INCLUDES:

- 2.5" SSD
- 2.5" USB enclosure
- 3.5" bracket and mounting screws
- SATA power and data cable
- 7mm to 9.5mm adapter
- 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 an 8GB partition.

<sup>2</sup> Some of the listed capacity on a Flash storage device is used for formatting and other functions and is thus 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, 7 (SP1).

