UV500 Encrypted SSD

An encrypted solution for every user.

Kingston's UV500 SSD dramatically improves your system's responsiveness with incredible boot, loading and transfer times compared to mechanical hard drives. It uses a Marvell 88SS1074 controller and 3D NAND Flash to power through daily tasks and improve productivity. Perfect for your desktops, small-form-factor PCs and laptops.

Available in multiple form factors and capacities from 120GB–1.92TB[1] giving you options to meet your system's needs. End-to-end data protection using 256-bit AES hardware-based encryption and support for TCG Opal 2.0 security management solutions allows the use of independent software vendors such as Symantec, McAfee and WinMagic.

Kingston's UV500 family of encrypted solid-state drives dramatically improves the responsiveness of your existing system or client upgrades with incredible boot, loading and transfer times compared to mechanical hard drives.

Powerful
Powered by a Marvell 88SS1074 controller combined with next-gen 64-layer 3D TLC NAND Flash for read and write speeds of up to 520MB/s and 500MB/s[2], this SSD is 10X faster than a traditional hard drive for better performance, ultra-responsive multi-tasking and an overall faster system. It is also cooler, quieter, and its shock and vibration resistance makes it ideal for notebooks, small-form-factor PCs and other mobile computing devices.

Encrypted SSD
UV500 provides end-to-end data protection using advanced 256-bit AES hardware-based encryption and features support for Trusted Computing Group (TCG) Opal 2.0 as required by security platforms. Enables the advantage of drive encryption and Data Loss Prevention (DLP) software programs to activate and manage TCG Opal, such as Symantec, McAfee and WinMagic. Serves as an important element to security policies when complying with industry standards and global regulations, such as the General Data Protection Regulation (GDPR)[3].

System Solution
Available in multiple capacities from 120GB–1.92TB[1], provides efficient client upgrades, Windows 10 migrations and advantages for system builders to extend the life of systems. For a faster boot drive, multitasking workloads or hosting your most frequently used applications.

> Next-Gen 64-layer, 3D TLC NAND

> AES 256-bit Hardware Encryption Self-Encrypting Drive (SED) and TCG Opal 2.0

> Available in multiple form factors (2.5"/M.2/mSATA)

> 10X faster than a 7200RPM hard drive[2]

> Multiple capacities up to 1.92TB[1]

> GDPR Ready

> 5 year warranty[4]

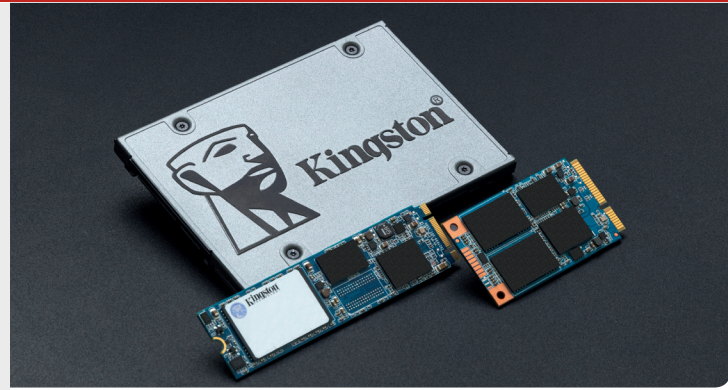## FEATURES/BENEFITS

> **3D TLC NAND** — Increased density is the key to supporting broader workloads, ultra-responsive multi-tasking and an overall faster system.

> **Encrypted protection** — Protect sensitive data with support for 256-bit AES hardware-based encryption and TCG Opal 2.0 making it GDPR ready[3].

> **Ideal for desktops, small-form-factor PCs and notebooks** — Comes in multiple form factors (2.5″/M.2/mSATA) to fit in a wider array of systems. Ideal for slimmer notebooks and systems with limited space.

> **Multiple capacities** — Available in a range of capacities up to 1.92TB[1] to meet your data storage requirements.

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**[1] 120GB, 240GB, 480GB, 960GB, 1.92TB
> **Controller** Marvell 88SS1074
> **NAND** 3D TLC
> **Encryption** encryption support (AES 256-bit)
> **Sequential read/write**[2]
  120GB — up to 520/320MB/s
  240GB — up to 520/500MB/s
  480GB — up to 520/500MB/s
  960GB — up to 520/500MB/s
  1.92TB — up to 520/500MB/s
> **Maximum 4K read/write**[2]
  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
  1.92TB — up to 79,000/50,000 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″)
  1.92TB — 52g (2.5″)
  120GB — 6.6g (M.2)
  240GB — 6.7g (M.2)
  480GB — 7.7g (M.2)
  960GB — 7.8g (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**[4] limited 5-year warranty with free technical support
> **Total bytes written**[5] 120GB — 60TB
  240GB — 100TB
  480GB — 200TB
  960GB — 480TB
  1.92TB — 800TB

KINGSTON PART NUMBERS

SUV500/120G Stand-alone drive
SUV500/240G Stand-alone drive
SUV500/480G Stand-alone drive
SUV500/960G Stand-alone drive
SUV500/1920G 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
SUV500B/1920G Desktop/Notebook upgrade kit
SUV500M8/120G M.2
SUV500M8/240G M.2
SUV500M8/480G M.2
SUV500M8/960G 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[6]

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

1 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.
2 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.
3 Product serves as an element within a managed security solution for ensuring compliance. Product itself does not warrant GDPR compliance.
4 Limited warranty based on 5 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).
6 Operating system software support: Windows® 10, 8.1, 8, 7 (SP1).

Kingston TECHNOLOGY