

Depend on excellence

Protecting your business critical data with Kingston® Technology's self-encrypting drives.

In the last few years, there's been a rise of breaches, theft and loss of confidential company and personal information. With global regulations, such as the EU GDPR, focused on data security, the reality of fines due to careless loss of data has driven many organisations to effectively secure their everyday business data. Such data is at the heart of every organisation and maintaining effective protection against data security threats to avoid any legal and financial impact is critical.

Implementing Self-Encrypting Drives' (SEDs) that provide hardware-based AES 256-bit encryption data security has fast become the solution to stop the increasing loss of sensitive data through the theft or loss of computers, laptops and tablets containing confidential company, customer and client information.

Kingston's Opal drive – Security without compromising performance

Kingston Technology's UV500 uses the latest 3D NAND flash and includes TCG Opal 2.0 with AES 256-bit encryption for customers looking to enhance their client system security. Multiple form factors provide flexibility in implementation with 2.5", M.2 and mSATA solutions for desktops, small-form-factor PCs, laptops and tablets.

As a security solution, the UV500 allows IT departments to protect company data - whether company IP, client or employee records, or other sensitive data on company laptops and desktops.

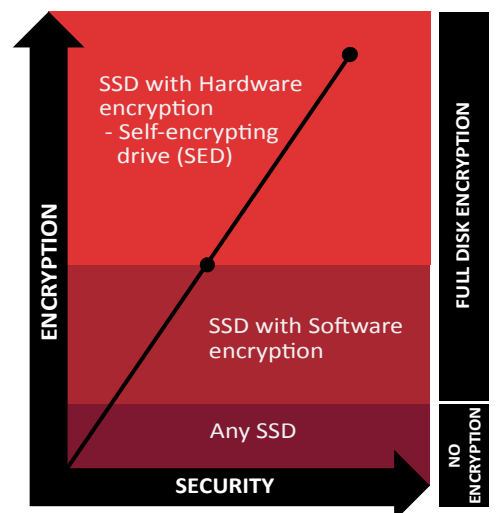
Why TCG Opal?

The Opal specification of the Trusted Computing Group (TCG) is a standard for creating and managing interoperable SEDs for the protection of data "in transit" and "at rest" ¹ from compromise due to loss, theft, repurposing or drive end of life.

UV500 Encrypted SSD



SSD Security



Easy to deploy, use and manage – Kingston's TCG Opal drives present many benefits for any organisation.

3D NAND performance

The latest technology and hardware encryption techniques allow the drive to operate at full data rate with minimal impact on system performance compared to software encryption.

Encrypted SSD

Opal is a proven standard for data confidentiality, providing hardware-based encryption to organisations as the most effective solution to restrict access from unauthorised use. Multiple form factor support for 2.5" / M.2 / mSATA solutions. A GDPR-ready asset in a company's quest for compliance.

Data Loss Prevention (DLP)

Minimise the risk of data theft compared to traditional hard drives that are non-protected and insecure. Easy to deploy and compliments endpoint drive security solutions from independent software vendors such as WinMagic, Symantec, McAfee, Sophos and others.

Take advantages of TCG Opal 2.0

Kingston's UV500 compatibility with the major TCG Opal ISVs (Independent Software Vendors), such as WinMagic Symantec, MacAfee, Sophos and others, enables manageability and simplified deployment.

Features include:

- User assignment to specific systems and user administration, allowing user access revocation and password resets
- Policy-based drive security enforcement with a seamless user experience
- Asset management of systems and assigned users, whether through Active Directory Integration or otherwise
- Revert utility enables the administrator/security officer to quickly erase and wipe the target computer boot disk, effectively resetting it to its factory settings

Stronger security

The encryption is always on and cannot be turned off. This prevents any access to the drive without authentication. Keys for encryption are generated within the drive and never leave.

Lower cost of ownership (TCO)

No need for complex infrastructure to manage encryption keys and no modifications to the operating system, applications or tools. This allows companies to have a lower overhead compared to software encryption.

UV500 Encrypted SSD

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 ready⁴.

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 1.92TB² 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)

Capacities² 120GB, 240GB, 480GB, 960GB, 1.92TB

Controller Marvell 88SS1074

NAND 3D TLC

Encryption encryption support (AES 256-bit)

Sequential read/write³

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/write³

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 temperature 0°C~70°C

Storage temperature -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/support⁵ limited 5-year warranty with free technical support

Total Bytes Written (TBW)⁶ 120GB — 60TB

240GB — 100TB

480GB — 200TB

960GB — 480TB

1.92TB — 800TB

Part Numbers Available

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

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

¹ Data at rest: Data stored on the drive.

² 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.

³ 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.

⁴ Product serves as an element within a managed security solution toward compliance. Product itself does not warrant GDPR compliance.

⁵ 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.

⁶ Total Bytes Written (TBW) is derived from the JEDEC Client Workload (JESD219A).

