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 organizations to effectively secure their everyday business data. Such data is at the heart of every organization 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 increasingly 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 PC, laptops and tablets

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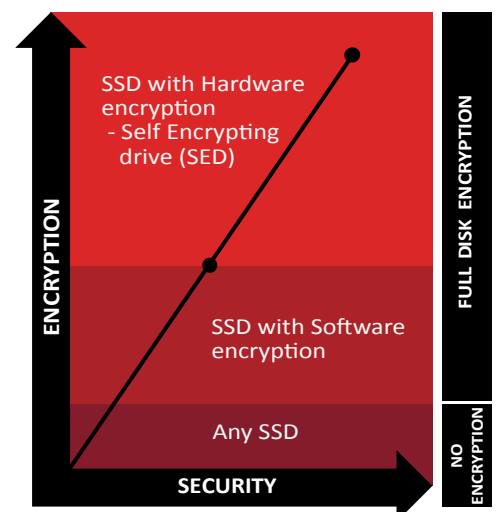
Why TCG Opal?

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 organization.

3D NAND Performance
Designed with the latest technology along with hardware encryption technology allows 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 organizations as the most effective solution to restrict access to unauthorized 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)
Minimize the risk of data theft when compared to traditional hard drives that are non-protected and unsecure. Easy to deploy and compliments endpoint drive security solutions from independent software vendors such as, WinMagic, Symantec, McAfee, Sophos and others.

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.

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 includes:

- 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 target computer boot disk, effectively resetting it back to its factory settings

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 ready[4].

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. It is ideal for slimmer notebooks and systems with limited space.

Multiple capacities — Available in a range of capacities up to 1.92TB[2] 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[2] 120GB, 240GB, 480GB, 960GB, 1.92TB

Controller Marvell 88SS1074

NAND 3D TLC

Encryption Encryption Support (AES 256-bit)

Sequential Read/Write[3]
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[3]
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℃~70℃

Storage temperature -40℃~85℃

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[5] 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

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