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## KC600 SSD

# Hardware-based self-encrypting drive with 3D TLC NAND

Kingston's KC600 is a full capacity SSD designed to provide remarkable performance and optimized to provide functional system responsiveness with incredible boot, loading, and transfer times. It comes in both 2.5" and mSATA form factors using SATA Rev 3.0 interface with backwards compatibility. The KC600 utilizes the latest 3D TLC NAND technology while supporting a full-security suite that includes AES 256-bit hardware encryption, TCG Opal, and eDrive. It features read/write speeds up to 550/520MB/s<sup>1</sup> to efficiently store your data up to 2TB<sup>2</sup>. It's available in a bundle kit which provides everything you need for a smooth and easy desktop and notebook installation and upgrade.

- › Remarkable performance
- › Features the latest 3D TLC NAND technology
- › Supports a full-security suite (TCG Opal, AES 256-bit, eDrive)
- › Available in range of full capacities

more >>

## FEATURES / BENEFITS

**Remarkable Performance** — Using the latest 3D TLC NAND technology, it enables read/write speeds up to 550/520MB/s.<sup>1</sup>

**Full-security suite** — Protect and secure your data with Kingston's self-encrypting drive.

**Easy Installation/Upgrade** — KC600 is available in an upgrade bundle kit that has everything you need to easily install your drive.

**Multiple capacities** — KC600 is available in a range of full capacities from 256GB to 2TB<sup>2</sup>

## SPECIFICATIONS

**Form Factor**  
2.5"

**Interface**

SATA Rev. 3.0 (6Gb/s) – with backwards capability to SATA Rev 2.0 (3Gb/s)

**Capacities<sup>2</sup>**

256GB, 512GB, 1024GB, 2048GB

**Controller**  
SM2259

**NAND**  
3D TLC

**Encrypted**

XTS-AES 256-bit encryption

**Sequential Read/Write<sup>1</sup>**

256GB — up to 550/500MB/s  
512GB–2048GB — up to 550/520MB/s

**Maximum 4K Read/Write<sup>1</sup>**  
up to 90,000/80,000 IOPS

**Power Consumption**

0.06W Idle / 0.2W Avg /  
1.3W (MAX) Read / 3.2W (MAX) Write

**Dimensions**

100.1mm x 69.85mm x 7mm

**Weight**

40g

**Operating temperature**

0°C~70°C

**Storage temperature**

-40°C~85°C

**Vibration operating**

2.17G Peak (7-800Hz)

**Vibration non-operating**

20G Peak (10-2000Hz)

**Life expectancy**

1 millions hours MTBF

**Warranty/support<sup>3</sup>**

Limited 5-year warranty with free technical support

**Total Bytes Written (TBW)<sup>4</sup>**

256GB — 150TB  
512GB — 300TB  
1024GB — 600TB  
2048GB — 1200TB

**Form Factor**  
mSATA

**Interface**

SATA Rev. 3.0 (6Gb/s) – with backwards capability to SATA Rev 2.0 (3Gb/s)

**Capacities<sup>2</sup>**

256GB, 512GB, 1024GB

**Controller**  
SM2259

**NAND**  
3D TLC

**Encrypted**

XTS-AES 256-bit encryption

**Sequential Read/Write<sup>1</sup>**

256GB — up to 550/500MB/s  
512GB–1024GB — up to 550/520MB/s

**Maximum 4K Read/Write<sup>1</sup>**  
up to 90,000/80,000 IOPS

**Power Consumption**

0.08W Idle / 0.1W Avg /  
1.2W (MAX) Read / 2.4W (MAX) Write

**Dimensions**

50.8mm x2 9.85mm x 4.85mm

**Weight**

7g

**Operating temperature**

0°C~70°C

**Storage temperature**

-40°C~85°C

**Vibration operating**

2.17G Peak (7-800Hz)

**Vibration non-operating**

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**Life expectancy**

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512GB — 300TB  
1024GB — 600TB



## KINGSTON PART NUMBERS

Stand-alone 2.5" drive	mSATA drive	Desktop/Notebook upgrade kit
SKC600/256G	SKC600MS/256G	SKC600B/256G
SKC600/512G	SKC600MS/512G	SKC600B/512G
SKC600/1024G	SKC600MS/1024G	SKC600B/1024G
SKC600/2048G		SKC600B/2048G

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*

\*Operating system software support: Windows® 10, 8.1, 8, 7 (SPI).

The cryptographic functionalities, mentioned in the present section, are implemented in the firmware of the product. The cryptographic functions of the firmware can only be changed during the manufacturing process and cannot be changed by a regular user. The product is designed for installation by the user by following the step-by-step instruction from the installation user guide, supplied with the product, and, thereby, can be used without further substantial support of the supplier.

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

- 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 Read/Write is based on 8GB partition.
- 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](http://kingston.com/flashguide).
- 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](http://Kingston.com/wa) for details.
- Total Bytes Written (TBW) is derived from the JEDEC Client Workload (JESD219A).

