

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 optimised 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 utilises 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 of up to 550/520MB/s[1] to efficiently store your data up to 2TB[2]. It's available in a bundle kit that 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**

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FEATURES / BENEFITS

Remarkable performance — Using the latest 3D TLC NAND technology, it enables read/write speeds of up to 550/520MB/s.[1]

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 install your drive easily.

Multiple capacities — KC600 is available in a range of full capacities from 256GB to 2TB.[2]

SPECIFICATIONS

Form factor
2.5"

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

Capacities[2]
256GB, 512GB, 1024GB, 2048GB

Controller
SM2259

NAND
3D TLC

Encrypted
XTS-AES 256-bit encryption

Sequential read/write[1]
256GB — up to 550/500MB/s
512GB–2048GB — up to 550/520MB/s

Maximum 4K read/write[1]
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

Viberation operating
2.17G peak (7-800Hz)

Viberation non-operating
20G peak (10-2000Hz)

Life expectancy
1 millions hours MTBF

Warranty/support[3]
limited 5-year warranty with free technical support

Total Bytes Written (TBW)[4]
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[2]
256GB, 512GB, 1024GB

Controller
SM2259

NAND
3D TLC

Encrypted
XTS-AES 256-bit encryption

Sequential read/write[1]
256GB — up to 550/500MB/s
512GB–1024GB — up to 550/520MB/s

Maximum 4K read/write[1]
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

Viberation operating
2.17G peak (7-800Hz)

Viberation non-operating
20G peak (10-2000Hz)

Life expectancy
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Total Bytes Written (TBW)[4]
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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 (SP1).

The cryptographic functions mentioned in the present section are implemented in the firmware of the product. The cryptographic functions of the firmware can be changed only during the manufacturing process and cannot be changed by a standard user. The product is designed for installation by the user in accordance with the step-by-step instructions in the installation user guide supplied with the product. It can therefore be used without further substantial support from the supplier.

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

1. 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.
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 memory guide at kingston.com/flashguide.
3. 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.
4. Total Bytes Written (TBW) is derived from the JEDEC Client Workload (JESD219A).

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