



HYPERX

Faster speeds for serious users.

Kingston's HyperX® SSD combines the latest SandForce® controller technology with premium NAND Flash, reducing load times while increasing performance and endurance. It provides high-speed SATA Rev 3.0 (6Gb/s) transfer speeds for larger bandwidth, which power users require for advanced gaming, multitasking and multimedia computing power.

Kingston's HyperX SSD lets users load games and applications faster, increase frames per second (FPS) and quickly transfer and edit large media files. It's cool, silent and requires less power with no additional cooling requirements.

When configuring the HyperX SSD partition, the user can choose between having the maximum available capacity for data storage, or give up a little space to increase performance and endurance. This additional space is called over provisioning¹ on an SSD. The amount of performance and endurance increase depends upon the type of data being stored on the HyperX SSD. The more data that is MPEG, JPG, ZIP, ARC, file types, the greater the benefit for this increased over provisioning.

HyperX SSD uses an advanced wear leveling technology that distributes writes evenly across all the Flash blocks in the SSD to maximize overall drive endurance. Additionally, this ensures that the individual Flash memory blocks are consumed at a very balanced rate, not to exceed a 2% difference between the most often written blocks and least written. This enables the HyperX SSD to provide the longest possible life for the user while maintaining optimal performance.

HyperX SSD is covered by a three-year warranty and legendary Kingston® reliability.

- > SandForce Driven
- > SATA Rev. 3 (6Gb/s)

HyperX SSD



Also available as a HyperX Upgrade Kit:

- Acronis Migration Software
- HyperX 3.5" Desktop mounting plate
- HyperX USB External Drive Bay
- HyperX Multi-head Screwdriver
- HyperX colored SATA Rev 3.0 (6Gb/s) cable

Applications

- Decreased load times of high resolution PC games
- Increased frame rates per second for a better gaming experience
- HD Video Rendering, Encoding, and Editing
- Adobe Applications (Photoshop, Premiere, Light Room)
- Pro Tools and other Professional Digital Audio applications
- Faster transfers of large media files
- Multitasking
- AutoCAD
- Movie Downloads, Transfers and Syncs

Features/specs on reverse >>

HyperX SSD

FEATURES/SPECIFICATIONS

- > **Form factor** 2.5"
- > **Controller** SandForce® SF-2281
- > **Components** Intel® 25nm Compute Quality MLC NAND (5k P/E Cycles)
- > **Interface** SATA Rev 3.0 (6Gb/s), SATA Rev 2.0 (3Gb/s)
- > **Capacities**² 120GB, 240GB, 480GB
- > **Sequential reads** **6Gb/s**³ 120GB / 240GB – 555MB/s
480GB – 540MB/s
- > **Sequential writes** **6Gb/s**³ 120GB / 240GB – 510MB/s
480GB – 450MB/s
- > **Sustained Random 4K R/W**⁴
120GB – 20,000/60,000 IOPS
240GB – 40,000/57,000 IOPS
480GB – 60,000/45,000 IOPS
- > **Max Random 4K R/W**⁴
120GB – 87,000/70,000 IOPS
240GB – 87,000/58,000 IOPS
480GB – 75,000/47,000 IOPS
- > **PCMARK® Vantage HDD Suite Score**
120GB / 240GB / 480GB: 58,000
- > **Supports S.M.A.R.T., TRIM, and Garbage Collection**
- > **Power Consumption**
120GB: 0.455 W (TYP) Idle / 1.6 W (TYP) Read / 2.0 W (TYP) Write
240GB: 0.455 W (TYP) Idle / 1.5 W (TYP) Read / 2.05 W (TYP) Write
480GB: 0.455 W (TYP) Idle / 1.5 W (TYP) Read / 1.65 W (TYP) Write
- > **Dimensions** 69.85mm x 100mm x 9.5mm
- > **Weight** 97g
- > **Operating temperatures** 0°C ~ 70°C
- > **Storage temperatures** -40°C ~ 85°C
- > **Shock Resistance** 1500G
- > **Vibration operating** 2.17G
- > **Vibration non-operating** 20G
- > **MTBF** 1,000,000 Hrs
- > **Warranty/Support** three-year warranty with free technical support

Test System: Asus P8P67 Motherboard, Intel Core i7 2600k 3.4GHz CPU, 4GB System Memory, NVIDIA GTX 460 Video Card



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

1 Note: The over provisioning can only be modified at the user's own risk and will require third party software to partition the drive. Kingston recommends that only experienced and knowledgeable users attempt to customize the over provisioning area. Kingston will not provide support or any additional tools to execute this feature.

2 Please Note: 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/flash_memory_guide.

3 Based on "out-of-box performance" with ATTO Disk Benchmark 2.41. Speed may vary due to host hardware, software, and usage.

4 Based on "out-of-box performance" with IOMeter08

5 Operating system software support: Windows® 7, Windows Vista® (SP2), Windows XP (SP3)

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KINGSTON PART NUMBERS

- SH100S3/120G (stand-alone drive)
- SH100S3/240G (stand-alone drive)
- SH100S3/480G (stand-alone drive)
- SH100S3B/120G (HyperX Upgrade Kit)
- SH100S3B/240G (HyperX Upgrade Kit)
- SH100S3B/480G (HyperX Upgrade Kit)

PACKAGE CONTENTS

- Combo Kit
 - 2.5" USB Enclosure
 - 3.5" Bracket & Mounting Screws
 - SATA Data Cable
 - Hard Drive Cloning Software⁵
 - Installation Guide
 - Multi-bit Screwdriver

