

# s600 Series

## SATA SSD

### Fast and Reliable Enterprise-Class SSDs

HGST s600 Series SATA SSDs provide users with advanced levels of data storage reliability and performance.

s600 Series SSDs from HGST are the ideal drop-in replacements for conventional HDDs in embedded systems, data centers, storage arrays and enterprise-related environments. A choice of enterprise-class, multi-level cell (MLC) or single-level cell (SLC) SSD solutions, along with unique flash management features—including HGST's proprietary flash controller, Secure Array of Flash Elements™ (SAFE) and CellCare™ technologies—result in an unmatched combination of read and write performance, reduced power usage and endurance.

When your applications demand fast and reliable access to data, s600 Series SSDs outperform HDDs, delivering up to 40,000 read IOPS and 37,000 IOPS, backed by HGST's full data-path protection.

Enterprise applications have growing data storage demands within data centers, using NAS and SAN storage, embedded systems and a growing number of consumer applications. For fast access to the right data at the right time, rely on s600 Series SSDs to deliver with uncompromising performance, reliability, endurance and value.

### Features and Benefits

Feature / Function	Benefits
HGST proprietary SSD controller technology	Provides unmatched performance, reliability and endurance in enterprise applications
High performance	Supports reads up to 40,000 IOPS and writes up to 37,000 IOPS
MLC and SLC support	Flexible high-performance and reliability in a variety of enterprise applications
Secure Array of Flash Elements (SAFE) Technology	Provides ability to recover from NAND flash page, block, die and chip failures, and maximizes the Mean Time Between Failure (MTBF) and Mean Time To Data Loss (MTTDL)
CellCare Technology	Extends the life of flash media to deliver enterprise-class endurance through advanced signal processing and adaptive flash management algorithms
Full data-path protection	Protects data in flash and cache memory and is the industry's first to map data using spare area of flash
Standard form factors	Drop-in replacements for 1.8-inch and 2.5-inch HDDs



**Information and Technical Support**

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**Specifications**

Interface	MLC	SLC	INDUSTRIAL SLC
Capacity	50/100/200/400GB	50/100/200GB	50/100/200GB
Type	3Gb SATA	3Gb SATA	3Gb SATA
Form Factor	2.5-inch/9.5mm 1.8-inch/5mm	2.5-inch/9.5mm	2.5-inch/9.5mm
<b>Performance</b>			
Sustained Read Throughput	Up to 250MB/s	Up to 250MB/s	Up to 250MB/s
Sustained Write Throughput	Up to 120MB/s	Up to 190MB/s	Up to 190MB/s
Max 100% Read IOPS	Up to 37,000	Up to 40,000	Up to 40,000
Max 100% Write IOPS	Up to 37,000	Up to 35,000	Up to 35,000
Max 100% Random Read IOPS	22,500 (4K)	24,000 (4K)	24,000 (4K)
Max 100% Random Write IOPS	3,100 (4K)	8,800 (4K)	8,800 (4K)
Random 70% Read/30% Write IOPS	8,300 (4K)	13,000 (4K)	13,000 (4K)
MTBF	2M hours with BER 1E-17	2M hours with BER 1E-17	2M hours with BER 1E-17
Endurance	10X Drive Writes/Day	Unlimited	Unlimited
<b>Physical</b>			
Power	6W	6W	6W
Power Supply	5V or 3.3V	5V	5V
<b>Environmental</b>			
Operational Temperature	0° to 60°C (Commercial)	0° to 60°C (Commercial)	-40° to 85°C (Industrial)
Humidity	Non-condensing 5-95%	Non-condensing 5-95%	Non-condensing 5-95%
Shock	350G	350G	1,500G
Altitude	-1,000 to 80,000ft	-1,000 to 80,000ft	-1,000 to 80,000ft
Compliance	Lead Free (RoHS)	Lead Free (RoHS)	Lead Free (RoHS)

<sup>1</sup> One GB is equal to one billion bytes when referring to hard drive capacity. Accessible capacity will vary depending on the operating environment and formatting.

<sup>2</sup> Portion of buffer capacity used for drive firmware

<sup>3</sup> MB is equal to MillionBytes

<sup>4</sup> Excludes command overhead

<sup>5</sup> MTBF target is based on a sample population and is estimated by statistical measurements and acceleration algorithms under median operating conditions. MTBF ratings are not intended to predict an individual drive's reliability. MTBF does not constitute a warranty.

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One GB is equal to one billion bytes and one TB equals 1,000 GB (one trillion bytes) when referring to hard drive capacity. Accessible capacity will vary from the stated capacity due to formatting and partitioning of the hard drive, the computer's operating system, and other factors.

MTBF target is based on a sample population and is estimated by statistical measurements and acceleration algorithms under median operating conditions. MTBF ratings are not intended to predict an individual drive's reliability. MTBF does not constitute a warranty.