

# Laptop SSHD Laptop Thin SSHD

## Data Sheet

### SSD Speed. HDD capacity. A Price that Makes Sense.

- Boots up and performs like an SSD<sup>1</sup>
- SATA 6Gb/s with NCQ for interface speed
- Faster than a traditional HDD<sup>1</sup>
- All-in-one design for simplicity and ease of installation
- Installs and works just like a traditional hard drive in any laptop or PC, and with any OS and application
- Now available in a thinner, 7mm z-height model for ultra-thin, ultra-light laptops
- Self-Encrypting Drive (SED) versions available to maximise data protection and minimise the risk of confidential information breaches
- Backed by a 3-year limited warranty<sup>2</sup>

### Best-fit Applications

- Laptops and mobile workstations
- Small form factor all-in-one PCs
- High-performance laptop gaming systems

<sup>1</sup> Performance may vary depending on user's hardware configuration and operating system. Testing performed on a Seagate® Laptop SSHD 1TB and Seagate Laptop Thin SSHD 500GB.

<sup>2</sup> Extended warranty products available. Consult your distributor for details.



# Laptop SSHD Laptop Thin SSHD



Specifications	1TB <sup>1</sup>	500GB <sup>1</sup>
Model Name	Laptop SSHD	Laptop Thin SSHD
Standard Model	ST1000LM014	ST500LM000
Self-Encrypting Drive (SED) Model	ST1000LM015	ST500LM001
Interface	SATA 6Gb/s NCQ	SATA 6Gb/s NCQ
<b>Performance</b>		
NAND Type/Size	MLC/8GB	MLC/8GB
DRAM Cache (MB)	64	64
SATA Transfer Rates Supported (Gb/s)	6.0/3.0/1.5	6.0/3.0/1.5
Average Data Throughput (MB/s)	100	100
PCMark Vantage Average HDD Score	19,838	19,838
Average Windows 8 Boot Time (sec)	<10	<10
Seek Average, Read (ms)	<12	<12
Seek Average, Write (ms)	<14	<14
<b>Configuration/Organisation</b>		
Heads/Discs	4/2	2/1
Bytes per Sector	4,096	4,096
<b>Reliability/Data Integrity</b>		
Head-Rest Method	QuietStep™ Ramp Load	QuietStep Ramp Load
Load/Unload Cycles	600,000	600,000
Non-recoverable Read Errors per Bits Read, Max	1 per 10 <sup>14</sup>	1 per 10 <sup>14</sup>
Annualised Failure Rate (AFR)	0.48%	0.48%
Limited Warranty (years) <sup>2</sup>	3	3
<b>Power Management</b>		
Power (W)		
Seek, Typical	2.7	2.5
Idling, Typical	0.9	0.9
<b>Environmental</b>		
Temperature (°C)		
Operating	0 to 60	0 to 60
Non-operating	–40 to 70	–40 to 70
Shock (Gs)		
Operating: 2ms	350	350
Non-operating	1,000	1,000
Acoustics (bels — sound power)		
Idling, Typical	2.2	2.0
Seek, Typical	2.4	2.2
<b>Physical</b>		
Height (mm/in)	9.5/0.374	7.0/0.276
Width (mm/in)	69.85/2.75	69.85/2.75
Depth (mm/in)	100.35/3.95	100.35/3.95
Weight (g/lb)	115/0.254	95.0/0.209
Carton Unit Quantity	50	50
Cartons per Pallet	60	60
Cartons per Layer	10	10

<sup>1</sup> One gigabyte, or GB, equals one billion bytes; and one terabyte, or TB, equals one trillion bytes when referring to drive capacity.

<sup>2</sup> Extended warranty products available. Consult your distributor for details.

[www.seagate.com](http://www.seagate.com)

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