

Laptop SSHD Laptop Thin SSHD

Data Sheet

SSD Speed. HDD Capacity. A Price That Makes Sense.

- Boots and performs like an SSD¹
- SATA 6Gb/s with NCQ for interface speed
- Faster than a traditional HDD¹
- 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
- Backed by a 3-year limited warranty

Best-Fit Applications

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

¹ 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.



Laptop SSHD Laptop Thin SSHD



Specifications	1TB ¹	500GB ¹
Model Number	ST1000LM014	ST500LM000
Model Name	Laptop SSHD	Laptop Thin SSHD
Interface	SATA 6Gb/s NCQ	SATA 6Gb/s NCQ
Performance		
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
PC Mark Vantage Average HDD Score	19,838	19,838
Average Windows 8 Boot Time (sec)	<10	<10
Seek Average, Read (ms)	<12.0	<12.0
Seek Average, Write (ms)	<14	<14
Configuration/Organization		
Heads/Disks	4/2	2/1
Bytes per Sector	4096	4096
Reliability/Data Integrity		
Head-Rest Method	QuietStep™ Ramp Load	QuietStep Ramp Load
Load/Unload Cycles	600,000	600,000
Norecoverable Read Errors per Bits Read, Max	1 per 10E14	1 per 10E14
Predicted Annualized Failure Rate (AFR)	0.48%	0.48%
Power Management		
Power (W)		
Seek, Typical	2.7	2.5
Idle, Typical	0.9	0.9
Environmental		
Temperature (°C)		
Operating	0 to 60	0 to 60
Nonoperating	-40 to 70	-40 to 70
Shock (Gs)		
Operating: 2ms	350	350
Nonoperating	1000	1000
Acoustics (bels—sound power)		
Idle, Typical	2.2	2.0
Seek, Typical	2.4	2.2
Physical		
Height (in/mm)	0.374/9.5	0.276/7.0
Width (in/mm)	2.75/69.85	2.76/70.1
Depth (in/mm)	3.95/100.35	3.95/100.35
Weight (lb/g)	0.254/115	0.209/95.0
Carton Unit Quantity	50	50
Cartons per Pallet	60	60
Cartons per Layer	10	10

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

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