

# Mobile HDD

Data Sheet

## Thin size. Huge storage. Amazing value.

- Seagate's highest-capacity thin 7mm laptop drives at 1TB and 2TB
- Best cost per TB and cost per millimeter for thin mobile/laptop customers
- Light in weight to support portable computers
- Enables drop-in 2TB capacity transition without the weight of traditional laptop drives
- Stores up to 200,000 photos, 250,000 songs or 124 hours of high-definition video<sup>1</sup>
- Standard SATA 6Gb/s interface for easy integration into existing mobile/laptop designs
- Easy deployment for laptop upgrades while enabling the small 7mm form factor system design

## Best-Fit Applications

- Traditional laptops
- Convertible and detachable storage
- Slim consumer electronics devices



<sup>1</sup> Calculations based on a 2TB drive. Quantitative usage examples for various applications are for illustrative purposes. Actual quantities will vary based on various factors, including file size, file format, features and application software.



# Mobile HDD



Specifications	2TB	1TB
Base Model	ST2000LM007	ST1000LM035
Seagate Secure™ Model <sup>1</sup>	ST2000LM009	ST1000LM037
Seagate Secure FIPS 140-2 Model <sup>1,2</sup>	ST2000LM010	ST1000LM038
Configuration/Organization		
Interface	SATA 6Gb/s	SATA 6Gb/s
Cache	128MB	128MB
Bytes per Sector (logical/physical)	512 / 4096	512 / 4096
Load/Unload Cycles	600,000	600,000
SMR Technology, Drive-Managed	Yes	Yes
Performance		
Seek Average (ms)	13ms	13ms
I/O Data Transfer Rate, Max (MB/s)	600MB/s	600MB/s
Max Sustainable Transfer Rate	100MB/s	100MB/s
Reliability/Data Integrity		
Warranty, Limited (years) <sup>3</sup>	2	2
Head-Rest Method	QuietStep™ Ramp Load	QuietStep Ramp Load
Nonrecoverable Read Errors per Bits Read, Max	1 per 10E14	1 per 10E14
Annualized Failure Rate (AFR)	0.48%	0.48%
Power Management		
Startup Power (12V, A)	1.0	1.0
Power, Seek, Typical (W)	1.7W	1.6W
Idle Average (W)	0.50W	0.45W
Environmental/Temperature		
Temperature, Operating (°C)	0°C ~ 60°C	0°C ~ 60°C
Temperature, Nonoperating (°C)	-40°C ~ 70°C	-40°C ~ 70°C
Shock, Operating: 2ms (Gs)	400Gs	400Gs
Shock, Nonoperating: 1ms (Gs)	1000Gs	1000Gs
Acoustic, Seek/Idle, Typical (bels)	2.4bels/2.2bels	2.2bels/2.0bels
Physical		
Height (mm/in)	7.0mm/0.268in	7.0mm/0.268in
Width (mm/in, max)	69.85mm/2.75in	69.85mm/2.75in
Depth (mm/in, max)	100.35mm/3.951in	100.35mm/3.951in
Weight (g/lb)	90g/0.198lb	90g/0.198lb
Carton Unit Quantity	50	50
Cartons per Pallet / Cartons per Layer	10 / 60	10 / 60
Special Features		
Halogen Free	Yes	Yes
RoHS Compliance	Yes	Yes

<sup>1</sup> SEDs and FIPS SEDs are not available in all models or countries. May require TCG-compliant host or controller support.

<sup>2</sup> See FIPS 140-2 Level 2 Certificate at <http://csrc.nist.gov/groups/STM/cmvp/documents/140-1/1401vend.htm>

<sup>3</sup> Extended warranty products available. Consult your distributor for details.

SEAGATE.COM

AMERICAS Seagate Technology LLC 10200 South De Anza Boulevard, Cupertino, California 95014, United States, 408-658-1000  
 ASIA/PACIFIC Seagate Singapore International Headquarters Pte. Ltd. 7000 Ang Mo Kio Avenue 5, Singapore 569877, 65-6485-3888  
 EUROPE, MIDDLE EAST AND AFRICA Seagate Technology SAS 16-18, rue du Dôme, 92100 Boulogne-Billancourt, France, 33 1-4186 10 00

© 2016 Seagate Technology LLC. All rights reserved. Printed in USA. Seagate, Seagate Technology and the Spiral logo are registered trademarks of Seagate Technology LLC in the United States and/or other countries. Quiet Step and Seagate Secure are either trademarks or registered trademarks of Seagate Technology LLC or one of its affiliated companies in the United States and/or other countries. The FIPS logo is a certification mark of NIST, which does not imply product endorsement by NIST, the U.S., or Canadian governments. All other trademarks or registered trademarks are the property of their respective owners. When referring to drive capacity, one gigabyte, or GB, equals one billion bytes and one terabyte, or TB, equals one trillion bytes. Your computer's operating system may use a different standard of measurement and report a lower capacity. In addition, some of the listed capacity is used for formatting and other functions, and thus will not be available for data storage. Quantitative usage examples for various applications are for illustrative purposes. Actual quantities will vary based on various factors, including file size, file format, features and application software. Actual data rates may vary depending on operating environment and other factors. The export or re-export of Seagate hardware or software is regulated by the U.S. Department of Commerce, Bureau of Industry and Security (for more information, visit [www.bis.doc.gov](http://www.bis.doc.gov)), and may be controlled for export, import and use in other countries. Seagate reserves the right to change, without notice, product offerings or specifications. DS1861.1-1602 February 2016