

Momentus Thin

Data Sheet

The World's First 7mm, 2.5 Inch Form Factor Drive

- 7mm z-height form factor enables thin chassis design for all segments of laptop computing.
- Seagate SmartAlign[™] technology provides a transition to 4K sectors without the need for software utilities.¹
- Self-Encrypting Drives mitigate data breaches, comply with data protection regulations and preserve brand recognition.¹
- Self-Encrypting Drives with FIPS 140-2 certification are approved by the US and Canadian governments.^{1,2}

Best-fit Applications

- Entry-level to high-performance laptops enjoy a stylish, thin and lightweight design without exceeding your budget.
- Netbooks have a thinner netbook without compromising on storage or affordability.
- Ultraportables take advantage of a stylish, thin and lightweight design without compromising on features.
- Slim consumer electronics devices add some style to your digital life.

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



Refer to specifications table for further information and feature options.

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Specifications	Momentus 5400 Drives			Momentus 7200 Drives	
	500GB1	320GB1	250GB1	320GB1	250GB1
Feature Options					
Standard Models	ST500LT012 ²	ST320LT020 ² ST320LT012 ³	ST250LT003 ² ST250LT012 ³	ST320LT007 ²	ST250LT007 ²
Self-Encrypting Drive Models	ST500LT0253			ST320LT014 ²	
Self-Encrypting Drive FIPS 140-2 Validated	ST500LT015 ³			ST320LT009 ²	
Interface	SATA 3Gb/s NCQ	SATA 3Gb/s NCQ	SATA 3Gb/s NCQ	SATA 3Gb/s NCQ	SATA 3Gb/s NCQ
Cache (MB)	16	16	16	16	16
Configuration					
Bytes per Sector	4,096	4,096	4,096	4,096	4,096
Reliability/Data Integrity					
Head-Rest Method	QuietStep™ Ramp Load	QuietStep Ramp Load	QuietStep Ramp Load	QuietStep Ramp Load	QuietStep Ramp Load
Load/Unload Cycles	>600,000	>600,000	>600,000	>600,000	>600,000
Non-recoverable Read Errors per Bits Read	1 per 10 ¹⁴	1 per 10 ¹⁴	1 per 10 ¹⁴	1 per 10 ¹⁴	1 per 10 ¹⁴
Annualised Failure Rate (AFR)	0.48%	0.48%	0.48%	0.48%	0.48%
Power Management					
Power (W) Seek, Typical Idling, Typical	1.2 0.45	1.4 0.48	1.4 0.48	1.6 0.66	1.6 0.66
Environmental					
Temperature (°C) Operating Non-operating	0 to 60 -40 to 70	0 to 60 -40 to 70	0 to 60 -40 to 70	0 to 60 -40 to 70	0 to 60 -40 to 70
Shock (Gs) Operating: 2ms Non-operating: 1ms	400 1,000	350 1,000	350 1,000	350 1,000	350 1,000
Acoustics (bels — sound power) Idling, Typical Seek, Typical	2.0 2.2	2.0 2.2	2.0 2.2	2.3 2.5	2.3 2.5
Physical					
Height (in/mm)	0.276/7.0	0.276/7.0	0.276/7.0	0.276/7.0	0.276/7.0
Width (in/mm)	2.76/70.1	2.76/70.1	2.76/70.1	2.76/70.1	2.76/70.1
Depth (in/mm)	3.959/100.55	3.959/100.55	3.959/100.55	3.959/100.55	3.959/100.55
Weight (lb/g)	0.203/92.0	0.203/92.0	0.203/92.0	0.203/92.0	0.203/92.0
Carton Unit Quantity	50	50	50	50	50
Cartons per Pallet	60	60	60	60	60
Cartons per Layer	10	10	10	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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AMERICAS ASIA/PACIFIC EUROPE, MIDDLE EAST AND AFRICA Seagate Technology LLC 10200 South De Anza Boulevard, Cupertino, California 95014, United States, +1 408 658 1000 Seagate Singapore International Headquarters Pte. Ltd. 7000 Ang Mo Kio Avenue 5, Singapore 569877, +65 6485 3888 Seagate Technology SAS 16-18 rue du Dôme, 92100 Boulogne-Billancourt, France, +33 1 41 86 10 00

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² Advanced Format 4K sector drive with SmartAlign™ technology resolves misalignment conditions.

³ SmartAlign technology is not available on this model.