

# Momentum 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.
- Self-Encrypting Drives mitigate data breaches, comply with data protection regulations and preserve brand recognition.<sup>1</sup>
- Self-Encrypting Drives with FIPS 140-2 certification are approved for the U.S. and Canadian governments.<sup>1,2</sup>

### Best-Fit Applications

- Entry-level laptops—Enjoy a stylish, thin and lightweight design without exceeding your budget.
- Netbooks—Get a thinner netbook without compromising on storage or affordability.
- Ultraportables—Take advantage of a stylish, thin and lightweight design without compromising on features.

<sup>1</sup> Refer to specifications table for further information and feature options.

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



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Specifications	500GB <sup>1</sup>	320GB <sup>1</sup>	250GB <sup>1</sup>
<b>Feature Options</b>			
Standard Models	ST500LT012	ST320LT012	ST250LT012
Self-Encrypting Drive Models	ST500LT025		
Self-Encrypting Drive FIPS 140-2 Validated	ST500LT015		
Interface	SATA 6Gb/s NCQ	SATA 6Gb/s NCQ	SATA 6Gb/s NCQ
Cache (MB)	16	16	16
<b>Configuration</b>			
Bytes per Sector	4096	4096	4096
<b>Reliability/Data Integrity</b>			
Head-Rest Method	Quiet Step™ Ramp Load	Quiet Step Ramp Load	Quiet Step Ramp Load
Load/Unload Cycles	>600,000	>600,000	>600,000
Nonrecoverable Read Errors per Bits Read	1 per 10E14	1 per 10E14	1 per 10E14
Annualized Failure Rate (AFR)	0.48%	0.48%	0.48%
<b>Power Management</b>			
Power (W)			
Seek, Typical	1.2	1.2	1.2
Idle, Typical	0.45	0.45	0.45
<b>Environmental</b>			
Temperature (°C)			
Operating	0 to 60	0 to 60	0 to 60
Nonoperating	-40 to 70	-40 to 70	-40 to 70
Shock (Gs)			
Operating: 2ms	400	400	400
Nonoperating: 1ms	1000	1000	1000
Acoustics (bels—sound power)			
Idle, Typical	2.0	2.0	2.0
Seek, Typical	2.2	2.2	2.2
<b>Physical</b>			
Height (in/mm)	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
Depth (in/mm)	3.959/100.55	3.959/100.55	3.959/100.55
Weight (lb/g)	0.209/95.0	0.209/95.0	0.209/95.0
Carton Unit Quantity	50	50	50
Cartons per Pallet	60	60	60
Cartons per Layer	10	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.



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