

Momentum Thin

Data Sheet

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

- 7 mm z-height form factor enables thin chassis design for all segments of laptop computing
- Self-Encrypting Drives that mitigate data breaches, comply with data protection regulations and preserve brand recognition¹
- Self-Encrypting Drives with FIPS 140-2 certification are approved by the US and Canadian governments^{1,2}

Best-Fit Applications

- Entry-level 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

¹ Refer to specifications table for further information and feature options.

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



Specifications	500GB ¹	320GB ¹	250GB ¹
Feature Options			
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
Configuration			
Bytes per Sector	4,096	4,096	4,096
Reliability/Data Integrity			
Head-Rest Method	QuietStep™ Ramp Load	QuietStep Ramp Load	QuietStep Ramp Load
Load/Unload Cycles	>600,000	>600,000	>600,000
Non-recoverable Read Errors per Bits Read	1 per 10E14	1 per 10E14	1 per 10E14
Annualised Failure Rate (AFR)	0.48%	0.48%	0.48%
Power Management			
Power (W)			
Seek, Typical	1.2	1.2	1.2
Idling, Typical	0.45	0.45	0.45
Environmental			
Temperature (°C)			
Operating	0 to 60	0 to 60	0 to 60
Non-operating	-40 to 70	-40 to 70	-40 to 70
Shock (Gs)			
Operating: 2ms	400	400	400
Non-operating: 1ms	1,000	1,000	1,000
Acoustics (bels — sound power)			
Idling, Typical	2.0	2.0	2.0
Seek, Typical	2.2	2.2	2.2
Physical			
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

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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