



2.5 FLASH-ACCELERATED HARD DRIVE DATA SHEET

The Fastest PC Hard Drive



Combining flash technology with a hard drive platform, the FireCuda[®] 2.5 flash-accelerated hard drive represents the fastest 2.5-inch hard drive available.



Best-Fit Applications

- Mainstream PCs upgrades
- High-performance PCs
- PC gaming systems
- Workstations
- Creative professional systems

Key Advantages

Flash-accelerated technology delivers blazing load speeds that allow for nonstop performance, play and productivity up to 5× faster than standard HDDs.

Enormous 500GB, 1TB and 2TB options make FireCuda the highest-capacity 2.5-inch hard drive on the market, providing customers a high-performance experience while being able to store massive amounts of data, all within a thin 7mm z-height.

Green Hybrid™ feature reduces device power consumption, helping users extend their drive's life and keep their costs down with a power-efficient drive.

Multi-Tier Caching Technology™ (MTC) enhances performance by using NAND flash, DRAM and media caching technologies, enabling users to load applications and files even faster.

Adaptive Memory® technology identifies frequently accessed data, thereby providing the data faster, consuming less power and extending drive life.

The cutting edge never felt so safe—5-year limited warranty is best-in-class for hard drive warranties.



Specifications	2TB	1TB	500GB
Standard Model Numbers	ST2000LX001	ST1000LX015	ST500LX025
Interface	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s
Performance			
Bytes per Sector (logical/physical)	512/4096	512/4096	512/4096
Data Transfer Rate (MB/s)	Up to 140	Up to 140	Up to 140
Recording Technology	SMR	SMR	SMR
Performance Versus 2.5-in. 5400-RPM/7200-RPM HDD			
Game Load Test ¹	140% Faster/50% Faster	140% Faster/50% Faster	140% Faster/50% Faster
Application Load Test ²	450% Faster/300% Faster	450% Faster/300% Faster	450% Faster/300% Faster
Windows 7 Boot Time ³	35% Faster/25% Faster	35% Faster/25% Faster	35% Faster/25% Faster
Special Features			
Halogen Free	Yes	Yes	Yes
RoHS Compliance	Yes	Yes	Yes
Reliability/Data Integrity			
Load/Unload Cycles	600,000	600,000	600,000
Head-Rest Method	QuietStep™ Ramp Load	QuietStep Ramp Load	QuietStep Ramp Load
Nonrecoverable Read Errors per Bits Read, Max	1 per 10E14	1 per 10E14	1 per 10E14
Limited Warranty (years) ⁴	5	5	5
Power Management			
Startup Current (+5V, A)	1	1	1
Read/Write Power, Average (W)	1.7/1.8	1.6/1.7	1.6/1.7
Idle Power, Average (W)	0.5	0.45	0.45
Environmental			
Temperature, Operating (°C)	0 to 60	0 to 60	0 to 60
Temperature, Nonoperating (°C)	-40 to 70	-40 to 70	-40 to 70
Shock, Operating: 2ms (Gs)	400	400	400
Shock, Nonoperating: 1ms (Gs)	1,000	1,000	1,000
Acoustics, Idle, Typical (bels—sound power)	2.2	2	2
Acoustics, Seek, Typical (bels—sound power)	2.4	2.2	2.2
Physical			
Height (mm/in)	7mm/0.276in	7mm/0.276in	7mm/0.276in
Width (mm/in)	69.85mm/2.75in	69.85mm/2.75in	69.85mm/2.75in
Depth (mm/in)	100.35mm/3.95in	100.35mm/3.95in	100.35mm/3.95in
Weight (g/lb, max)	96g/0.212lb	92g/0.203lb	92g/0.203lb
Carton Unit Quantity	50	50	50
Cartons per Pallet/Cartons per Layer	60/10	60/10	60/10

1 Testing conducted by Seagate using PCMark 7 system storage gaming test. Results have been rounded for display purposes. HDD performance may vary by brand, model and application.

2 Testing conducted by Seagate using PCMark 7 system storage starting applications test. Results have been rounded for display purposes. HDD performance may vary by brand, model and application.

3 Testing conducted by Seagate using Intel Core i5-based with Intel QM77 chipset laptop and configured with 8GB RAM. Tested using Microsoft utility. Results have been rounded for display purposes. HDD performance may vary by brand, model and application.

4 Extended warranty products available. Consult your distributor for details.

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