



3.5 SSHD DATA SHEET

Ferocious Performance.
Superior Storage. Tireless Durability.



FireCuda™ 3.5-inch solid state hard drives blend SSD technology with an HDD platform for the instant-on performance and capacity you need.



Best-Fit Applications

- Desktop PCs
- PC gaming
- Workstations
- High-performance direct-attached storage (DAS) devices

Key Advantages

Smart 1TB and 2TB capacities with onboard flash memory.

Save time with a drive that boots in seconds, not minutes.¹

A perfect upgrade for gamers, creative professionals and PC enthusiasts who want it all, now!

Game up to 5x faster than with traditional 7200-RPM hard drives, and eliminate the need to uninstall games in order to make room for new ones. Store up to 40 games per TB (at ~25GB per game).¹

SATA 6Gb/s interface speed.

Installs and operates like a standard hard drive. No additional drivers or software required.

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

¹ Performance may vary depending on user's hardware configuration and operating system.



Specifications	2TB ¹	1TB ¹
Standard Model Numbers	ST2000DX002	ST1000DX002
Interface	SATA 6Gb/s NCQ	SATA 6Gb/s NCQ
Form Factor (in)	3.5	3.5
Features and Performance		
NAND Type/Size	MLC/8GB	MLC/8GB
SATA Transfer Rates Supported (Gb/s)	6.0/3.0/1.5	6.0/3.0/1.5
Seek Average, Read (ms)	<9.5	<8.5
Seek Average, Write (ms)	<9.5	<8.5
Average Data Rate, Read, Avg All Zones (MB/s)	156	156
Average Data Rate From NAND Media (MB/s)	190	190
Max Sustained Data Rate, OD Read (MB/s)	210	210
DRAM Cache (MB)	64	64
Configuration/Organization		
Heads/Disks	4/2	2/1
Bytes per Sector	4096	4096
Reliability/Data Integrity		
Load/Unload Cycles	300,000	300,000
Nonrecoverable Read Errors per Bits Read, Max	1 per 10E14	1 per 10E14
Predicted Annualized Failure Rate (AFR)	<1%	<1%
Warranty, Limited (years)	5	5
Power Management		
Operating Power, Typical (W)	6.7	5.9
Idle2 Power, Typical (W)	4.5	3.36
Standby Mode/Sleep Mode, Typical (W)	0.75/0.75	0.63/0.63
Environmental/Temperature		
Operating (°C)	0 to 60	0 to 60
Nonoperating (°C)	-40 to 70	-40 to 70
Physical		
Height (mm/in, max)	26.11/1.028	19.87/0.782
Width (mm/in, max)	101.6/4.0	101.6/4.0
Depth (mm/in, max)	146.99/5.787	146.99/5.787
Weight (g/lb typical)	535/1.18	400/0.88
Carton Unit Quantity	20	25
Cartons per Pallet/Cartons per Layer	40/8	40/8

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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