



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 1 TB and 2 TB 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 5× faster than with traditional 7,200 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 ~25 GB per game).¹

SATA 6 Gb/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	2 TB	1 TB
Standard Model Numbers	ST2000DX002	ST1000DX002
Interface	SATA 6 Gb/s NCQ	SATA 6 Gb/s NCQ
Form Factor (in)	3.5	3.5
Features and Performance		
NAND Type/Size	MLC/8 GB	MLC/8 GB
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)	210Mb/s	210Mb/s
DRAM Cache (MB)	64	64
Recording Technology	CMR	CMR
Configuration/Organization		
Heads/Discs	4/2	2/1
Bytes per Sector	4,096	4,096
Reliability/Data Integrity		
Load/Unload Cycles	300,000	300,000
Non-recoverable Read Errors per Bits Read, Max	1 per 10E14	1 per 10E14
Predicted Annualised 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
Temperature, Non-operating (°C)	-40 to 70	-40 to 70
Physical		
Height (mm/in, max)	26.11 mm/1.028 in	19.87 mm/0.782 in
Width (mm/in, max)	—	—
Depth (mm/in, max)	146.99 mm/5.787 in	146.99 mm/5.787 in
Weight (g/lb, typical)	535 g/1.18 lb	400 g/0.88 lb
Carton Unit Quantity	20	25
Cartons per Pallet / Cartons per Layer	40/8	40/8