

Data Sheet

## Cheetah® NS.2

Lowest power, highest reliability for  
3.5-inch Tier 1 solutions

**600, 450 and 300 GB • 10K RPM • 6-Gb/s SAS 2.0  
(600 GB and 450 GB) and 4-Gb/s FC**

### Key Advantages

- Lowest-power 3.5-inch Tier 1 drive (over 20 percent lower than any other 3.5-inch Tier 1 drive)
- Highest-capacity Tier 1 drive (600 GB)
- Highest reliability rating in the industry
- Seagate PowerTrim™ technology dynamically reduces power usage.
- Supports 6-Gb/s SAS 2.0 (600 GB and 450 GB) and 4-Gb/s FC
- Government-grade Self-Encrypting Drive option<sup>1</sup>

### Best-Fit Applications

- Email
- Business processing
- Transaction processing
- Decision support
- Storage area networks
- Networked attached storage
- Internet and e-commerce



<sup>1</sup> The Self-Encrypting Drive option is available only to major OEMs.

### Lowest Cost of Ownership

- The Seagate Cheetah NS.2 drive is the lowest-power, highest-capacity and highest-reliability solution for 3.5-inch Tier 1 requirements.
- Lower watts/GB ratio helps achieve reduced power and cooling costs while optimizing capacity requirements.

### MTBF Improvement

- Seagate continues to focus on reliability and data protection. MTBF is increased to 1.6 million hours.
- Enhanced error correction code better maintains performance throughout the life of the drive and reduces the probability of lost data.
- Seagate-exclusive Background Media Scan proactively scans the media for potential defects during drive idle time. It enables incipient errors to be corrected before data is lost.
- Our Quick and Robust Download feature loads new firmware in less than 2 seconds, and built-in protection ensures no corruption in the event of a power failure during firmware switch.

### Seagate Global Customer Support

- Get presales and technical support at [support.seagate.com](http://support.seagate.com).
- Visit our knowledge base for answers to common support questions.
- Find documentation for current and legacy drives.
- Utilize our online troubleshooting and diagnostic tools.
- Download DiscWizard™ to help migrate data from an older drive.
- Seagate also offers multi-lingual phone, email and chat support.

Specifications	600 GB <sup>1</sup>	450 GB <sup>1</sup>	300 GB <sup>1</sup>
<b>Model Number</b>	ST3600002FC ST3600002SS	ST3450802FC ST3450802SS	ST3300602FC
<b>Capacity</b>			
Formatted 512 KB/Sector (GB)	600	450	300
<b>Performance</b>			
<b>External Transfer Rate</b>			
4-Gb/s Fibre Channel (MB/s)	400	400	400
6-Gb/s SAS 2.0 <sup>2</sup> (MB/s)	600	600	
<b>Spindle Speed (RPM)</b>	10K	10K	10K
<b>Average Latency (ms)</b>	3.00	3.00	3.00
<b>Seek Time</b>			
Average Read/Write (ms)	3.8/4.4	3.8/4.4	3.8/4.4
Track-to-Track Read/Write (ms)	0.2/0.2	0.2/0.2	0.2/0.2
<b>Transfer Rate</b>			
Maximum Internal (Mb/s)	1840	1840	1840
Typical Sustained (MB/s)	150	150	150
<b>Cache, Multisegmented (MB)</b>	16	16	16
<b>Configuration/Reliability</b>			
<b>Disks</b>	4	3	2
<b>Heads</b>	8	6	4
<b>Nonrecoverable Read Errors per Bits Read</b>	1 sector per 10E16	1 sector per 10E16	1 sector per 10E16
<b>Reliability Rating at Full 24x7 Operation (Annualized Failure Rate/MTBF hours)</b>	0.55%/1,600,000	0.55%/1,600,000	0.55%/1,600,000
<b>Power</b>			
<b>Typical Operating (W)</b>			
4-Gb/s Fibre Channel	10.07	9.54	9.3
6-Gb/s SAS 2.0 <sup>2</sup>	9.75	9.15	
<b>Idle (W)</b>			
4-Gb/s Fibre Channel	6.49	5.96	5.6
6-Gb/s SAS 2.0 <sup>2</sup>	6.22	5.74	
<b>Environmental</b>			
<b>Temperature, Operating (°C)</b>	5 to 55	5 to 55	5 to 55
<b>Temperature, Nonoperating (°C)</b>	-40 to 70	-40 to 70	-40 to 70
<b>Shock, Operating (Read Only): 2 ms (Gs)</b>	60	60	60
<b>Shock, Nonoperating: 2 ms (Gs)</b>	300	300	300
<b>Acoustics, Idle (bels—sound power)</b>	3.3	3.3	3.3
<b>Vibration, Operating (Gs)</b>	1.0	1.0	1.0
<b>Vibration, Nonoperating (Gs)</b>	3.0	3.0	3.0
<b>Physical</b>			
<b>Height (in/mm)</b>	1.0/25.4	1.0/25.4	1.0/25.4
<b>Width (in/mm)</b>	4.0/101.6	4.0/101.6	4.0/101.6
<b>Depth (in/mm)</b>	5.76/146.52	5.76/146.52	5.76/146.52
<b>Weight (lb/kg)</b>	1.51/0.686	1.51/0.686	1.48/0.671

<sup>1</sup> One gigabyte, or GB, equals one billion bytes and one terabyte, or TB, equals one trillion bytes when referring to hard drive capacity.

<sup>2</sup> SAS interface is 6-Gb/s capable and 3-Gb/s verified. The drive will negotiate 6-Gb/s speeds on 6-Gb/s HBA or Expander. Verification of 6 Gb/s will occur at a later date.

[www.seagate.com](http://www.seagate.com)

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