

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 per cent 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 option¹

Best-fit Applications

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



¹ The self-encrypting drive option is available only to major OEMs.

Cheetah® NS.2

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



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 optimising 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 two seconds and built-in protection ensures no corruption in the event of a power failure during firmware switch

Seagate Global Customer Support

- Get pre-sales and technical support at www.seagate.com/www/en-gb/support/
- Visit our knowledge base for answers to common support questions
- Find documentation for current and legacy drives
- Use our online troubleshooting and diagnostic tools
- Download DiscWizard™ to help migrate data from an older drive
- Seagate also offers multilingual phone, email and chat support

Specifications	600 GB ¹	450 GB ¹	300 GB ¹
Model Number	ST3600002FC ST3600002SS	ST3450802FC ST3450802SS	ST3300602FC
Capacity			
Formatted 512 KB/Sector (GB)	600	450	300
Performance			
External Transfer Rate			
4-Gb/s Fibre Channel (MB/s)	400	400	400
6-Gb/s SAS 2.0 ² (MB/s)	600	600	
Spindle Speed (RPM)	10K	10K	10K
Average Latency (ms)	3.00	3.00	3.00
Seek Time			
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
Transfer Rate			
Maximum Internal (Mb/s)	1,840	1,840	1,840
Typical Sustained (MB/s)	150	150	150
Cache, Multi-segmented (MB)	16	16	16
Configuration/Reliability			
Discs	4	3	2
Heads	8	6	4
Non-recoverable Read Errors per Bits Read	1 sector per 10 ¹⁶	1 sector per 10 ¹⁶	1 sector per 10 ¹⁶
Reliability Rating at Full 24x7 Operation (Annualised Failure Rate/MTBF hours)	0.55%/1,600,000	0.55%/1,600,000	0.55%/1,600,000
Power			
Typical Operating (W)			
4-Gb/s Fibre Channel	10.07	9.54	9.3
6-Gb/s SAS 2.0 ²	9.75	9.15	
Idle (W)			
4-Gb/s Fibre Channel	6.49	5.96	5.6
6-Gb/s SAS 2.0 ²	6.22	5.74	
Environmental			
Temperature, Operating (°C)	5 to 55	5 to 55	5 to 55
Temperature, Non-operating (°C)	-40 to 70	-40 to 70	-40 to 70
Shock, Operating (Read Only): 2 ms (Gs)	60	60	60
Shock, Non-operating, 2 ms (Gs)	300	300	300
Acoustics, Idle (bels — sound power)	3.3	3.3	3.3
Vibration, Operating (Gs)	1.0	1.0	1.0
Vibration, Non-operating (Gs)	3.0	3.0	3.0
Physical			
Height (in/mm)	1.0/25.4	1.0/25.4	1.0/25.4
Width (in/mm)	4.0/101.6	4.0/101.6	4.0/101.6
Depth (in/mm)	5.76/146.52	5.76/146.52	5.76/146.52
Weight (lb/kg)	1.51/0.686	1.51/0.686	1.48/0.671

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

² 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.

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