

## Cheetah 10K.7

Reliability, Performance and Low Ownership Cost



Lowest Cost  
of Ownership  
10K Disc Drive

**300, 146 and 73 Gbytes • 10K RPM • Ultra320 SCSI, 2 Gbit/sec Fibre Channel**

### Key Advantages

- Highest reliability in the industry—designed for “full duty cycle” applications
- Seagate®-exclusive Background Media Scan and enhanced Error Correction Code
- Low power and cooling requirements
- Low acoustics
- Industry-leading Enterprise solutions with a choice of Ultra320 SCSI or 2 Gbit/sec Fibre Channel

### Best-Fit Applications

- Data warehousing and data mining
- Multi-user multimedia, imaging and video
- Cost per gigabyte RAID
- Entry-level to mainstream server
- Network Attached Storage (NAS)
- Storage Area Networks (SAN)





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## Reliability, Performance and Low Ownership Cost

### Highest Reliability

- The Cheetah® 10K.7 uses a fluid dynamic bearing (FDB) motor, the same technology used by the Cheetah 15K. FDB reduces the drive's acoustics and improves reliability with the removal of ball bearings in the motor.
- Seagate-exclusive enhanced Error Correction Code better maintains performance throughout the life of the drive and improves reliability by decreasing the bit error rate, resulting in a lower probability of lost data.
- Background Media Scan, a Seagate-exclusive feature, scans the media for potential defects during drive idle time—rather than in the midst of trying to complete a customer's read/write request—without using system bandwidth. It enables incipient errors to be corrected before data is lost.
- The Cheetah 10K.7 is designed and manufactured by the same teams that successfully delivered the past six award-winning generations of Cheetah.

### World-Class Technical Support

- Certified, experienced support staff
- Rated "Above Average to Excellent" by 95 percent of our customers
- Support lines with the shortest wait times in the industry
- Individually archived case histories for quick reference
- Web-based Q&A forum and autoreply e-mail
- Seagate Design Service Centers (DSC) help companies transform innovative ideas into viable products.

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

1-800-732-4283 (1-800-SEAGATE)

Specifications	300 GB <sup>1</sup>	146 GB <sup>1</sup>	73 GB <sup>1</sup>
<b>Model Number</b>	ST3300007LC/LW/FC	ST3146707LC/LW/FC	ST373207LC/LW/FC
<b>Capacity</b>			
Formatted 512 Kbytes/Sector (Gbytes)	300.0	146.8	73.4
<b>Interface</b>	Ultra320 SCSI	Ultra320 SCSI	Ultra320 SCSI
External Transfer Rate (Mbytes/sec)	320	320	320
<b>Interface</b>	2 Gbit/sec FC	2 Gbit/sec FC	2 Gbit/sec FC
External Transfer Rate (Mbytes/sec)	200	200	200
<b>Performance</b>			
Spindle Speed (RPM)	10K	10K	10K
Average Latency (msec)	3.00	3.00	3.00
Seek Time			
Average Read/Write (msec)	4.7/5.3	4.7/5.3	4.7/5.3
Track-to-Track Read/Write (msec)	0.2/0.5	0.2/0.5	0.2/0.5
<b>Transfer Rate</b>			
Internal (Mbits/sec)	470 to 944	470 to 944	470 to 944
Internal Formatted (Mbytes/sec)	59 to 118	59 to 118	59 to 118
Sustained (Mbytes/sec)	39 to 80	39 to 80	39 to 80
Cache, Multisegmented (Mbytes)	8	8	8
<b>Configuration/Organization</b>			
Discs	4	2	1
Heads	8	4	2
Nonrecoverable Read Errors per Bits Read	1 sector per 10 <sup>15</sup>	1 sector per 10 <sup>15</sup>	1 sector per 10 <sup>15</sup>
Annualized Failure Rate (percent)	0.62	0.62	0.62
<b>Power Management</b>			
Typical (watts) SCSI	16.4	13.0	11.7
Fibre Channel	18.0	15.5	14.0
Power Idle (watts) SCSI	10.1	7.8	6.8
Fibre Channel	12.2	9.9	8.7
<b>Environmental</b>			
Temperature, Operating (°C)	5 to 55	5 to 55	5 to 55
Temperature, Nonoperating (°C)	-40 to 70	-40 to 70	-40 to 70
Shock, Operating: 2 msec (Gs)	60	60	60
Shock, Nonoperating: 2 msec (Gs)	225	225	225
Acoustics Idle (bels—sound power)	3.3	2.9	2.7
Vibration, Operating: 5-500 Hz (Gs)	1.0	1.0	1.0
Vibration, Nonoperating: 22-500 Hz (Gs)	3.0	3.0	3.0
<b>Physical</b>			
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)	5.75/146.05	5.75/146.05	5.75/146.05
Weight (lb/kg)	1.6/0.726	1.6/0.726	1.6/0.726
<b>Warranty</b>			
Limited Warranty (years)	5	5	5

<sup>1</sup>1 Mbyte = 1,000,000 bytes.