

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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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.

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

Specifications	300 GB ¹	146 GB ¹	73 GB ¹
Model Number	ST3300007LC/LW/FC	ST3146707LC/LW/FC	ST373207LC/LW/FC
Capacity			
Formatted 512 Kbytes/Sector (Gbytes)	300.0	146.8	73.4
Interface	Ultra320 SCSI	Ultra320 SCSI	Ultra320 SCSI
External Transfer Rate (Mbytes/sec)	320	320	320
Interface	2 Gbit/sec FC	2 Gbit/sec FC	2 Gbit/sec FC
External Transfer Rate (Mbytes/sec)	200	200	200
Performance			
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
Transfer Rate			
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
Configuration/Organization			
Discs	4	2	1
Heads	8	4	2
Nonrecoverable Read Errors per Bits Read	1 sector per 10 ¹⁵	1 sector per 10 ¹⁵	1 sector per 10 ¹⁵
Annualized Failure Rate (percent)	0.62	0.62	0.62
Power Management			
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
Environmental			
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
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)	5.75/146.05	5.75/146.05	5.75/146.05
Weight (lb/kg)	1.6/0.726	1.6/0.726	1.6/0.726
Warranty			
Limited Warranty (years)	5	5	5

¹1 Mbyte = 1,000,000 bytes.