Momentus 42

Harness the power of experience, commitment and innovation
from the industry's only independent supplier of notebook drives

The Best of Momentus
—High Reliability and
Quiet Acoustics—With
4200-RPM-Class
Performance

40 and 20 Gbytes • 4200 RPM • 2.5-Inch Notebook

Key Advantages

- 4200-RPM-class performance powers common home and office applications with ease
- Inaudible acoustics provided by proven Seagate® SoftSonic™ FDB motor and QuietStep™ ramp load technology
- Robust design and 225-G operational shock tolerance to withstand today's rugged notebook operating environment
- Available from the industry's only independent supplier of notebook disc drives

Best-Fit Applications

- Notebook computers
- External storage
- Digital audio
- Tablet PCs

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The Seagate 3D Defense System—No One Does More to Protect Your Drives

DRIVE DEFENSE

- QuietStep ramp load technology provides additional protection against shock while delivering whisper-quiet load/unload acoustics.
- G-Force Protection guards the drive against nonoperating shock and prevents damage to the motor, heads, head-arm, clamp and discs during shipping, handling and daily operation.

DATA DEFENSE

- ECC (error-correction code) performs fast on-the-fly data validation and error checking for reliable data storage and retrieval.
- Safe Sparing ensures data is not compromised by reserving spare sectors on a drive and substituting them if defects are detected in other sectors.
- CBDS (continuous background defect scanning) proactively identifies and eliminates defects.

DIAGNOSTIC DEFENSE

- SeaTools™ Suite diagnostic software is designed to reduce drive returns, decrease drive repair costs and protect data.
- Web-based tools enable users to identify and solve common system-related issues.
- Enhanced S.M.A.R.T. (Self-Monitoring, Analysis and Reporting Technology) predicts and prevents problems transparently before they affect the end user.
- NDST (Enhanced Drive Self-Test) reduces diagnostic time.

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

Specifications	40 GB[1]	20 GB[1]
Model Number	ST94019A	ST92014A
Interface (Mbytes/sec)	Ultra ATA/100	Ultra ATA/100
Performance		
Transfer Rate		
Maximum Internal (Mbytes/sec)	48.25	48.25
Maximum External (Mbytes/sec)	100	100
Sustained Transfer Rate (Mbytes/sec)	33.0	33.0
Cache, Multisegmented (Mbytes)	2	2
Average Seek (msec)	12.0	12.0
Average Latency (msec)	5.6	5.6
Performance Level [2]	4,200	4,200
Configuration/Organization		
Discs/Heads	1/2	1/1
Bytes per Sector	512	512
Logical CHS	16,383/16/63	16,383/16/63
Recording Method	RLL 0,11	RLL 0,11
Reliability/Data integrity		
Head-Rest Method	QuietStep ramp load	QuietStep ramp load
3D Defense System™	Yes	Yes
Nonrecoverable Read Errors per Bits Read	1 per 10^{14} bits read	1 per 10^{14} bits read
Power Management		
+5 VDC ±5% (amps max)	1.2	1.2
Power Management (watts) Seek	2.4	2.4
Read/Write	2.4	2.4
Low Power Idle/Standby	.97/.36	.97/.36
Environmental		
Temperature, Operating (°C)	5 to 55	5 to 55
Temperature, Nonoperating (°C)	−40 to 65	−40 to 65
Shock, Operating: 2 msec (Gs)	225	225
Shock, Nonoperating: 1 and 2 msec (Gs)	800	800
Acoustics		
Idle (bels—sound power)	2.3	2.3
Quiet Seek (bels—sound power)	2.5	2.5
Performance Seek (bels—sound power)	3.0	3.0
Physical		
Height (in/mm)	.374/9.5	.374/9.5
Width (in/mm)	2.75/69.85	2.75/69.85
Depth (in/mm)	3.945/100.2	3.945/100.2
Weight (lb/g)	.218/99	.218/99

[1] Capacity calculated as 1 Gbyte = 10^9 bytes

[2] Actual spin speed is 5400 RPM