Seagate ®

Data Sheet

Momentus® 5400.6

Durable mobility anywhere, anytime

500, 320, 250, 160 and 120 GB • 5400 RPM • SATA 3Gb/s with NCQ • G-Force Protection™

Key Advantages

- 8-MB cache delivers fast performance.
- Robust design and high shock tolerance enable mobility in rugged operating environments.
- 1000 Gs of nonoperating shock make the drive ideal for notebook PCs and industrial applications.
- G-Force Protection™ feature available for added robustness in mobile environments
- Green features:
  - Leverages Seagate laptop power management technology
  - Utilizes ramp load features that remove the head from the disk during idle periods, improving idle power consumption and adding to the durability of the drive
- QuietStep™ technology enables ultra-quiet load/unload acoustics
- SATA 3Gb/s interface with Native Command Queuing
- Perpendicular recording technology
- High instantaneous (burst) data transfer rates up to 3 Gb/s

Best-Fit Applications

- Mainstream laptops
- External storage solutions/boxes
- Whitebooks
- Industrial applications requiring a small form factor

Momentus® 5400.6

Durable mobility anywhere, anytime

Seagate®

With fourth-generation perpendicular magnetic recording technology and capacities up to 500 GB, the Seagate® Momentus® 5400.6 drive offers the best combination of performance, capacity, mobility and durability in a laptop hard drive. The Momentus 5400.6 drive offers a fast SATA 3Gb/s interface plus an 8-MB cache, making the drive ideal for mainstream laptops, workstations, gaming laptops and personal external storage.

G-Force Protection

When a laptop is dropped, the most catastrophic damage to the hard drive occurs when the head scrapes across the surface of the disk, causing potential data loss. The G-Force Protection feature, an optional drop sensor, protects the Momentus 5400.6 drive against shock by sensing when the system is in a free-fall state, moving the heads off the platter and locking them in place—all within three-tenths of a second.

Seagate Global Customer Support

- Get presales and technical support at 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™ help transfer data from an older drive.
- Seagate also offers multi-lingual phone, email and chat support.
- Seagate Design Service Centers help companies transform innovative ideas into viable products.

Specifications	500 GB[1]	320 GB[1]	250 GB[1]	160 GB[1]	120 GB[1]
Model Number	ST9500325AS ST9500325ASG[2]	ST9320325AS ST9320325ASG[2]	ST9250315AS ST9250315ASG[2]	ST9160314AS ST9160314ASG[2]	ST9120315AS
Interface Options	SATA 3Gb/s NCQ	SATA 3Gb/s NCQ	SATA 3Gb/s NCQ	SATA 3Gb/s NCQ	SATA 3Gb/s NCQ
Performance					
Transfer Rate Maximum Internal (Mb/s) Maximum External (MB/s)	1175 300	1175 300	1175 300	1175 300	1175 300
Cache (MB)	8	8	8	8	8
Average Latency (ms)	5.6	5.6	5.6	5.6	5.6
Spindle Speed (RPM)	5400	5400	5400	5400	5400
Areal Density (Gb/in²)	394	394	394	394	394
Configuration/Organization					
Disks/Heads	2/4	2/3	1/2	1/2	1/1
Bytes per Sector	512	512	512	512	512
Reliability/Data Integrity					
G-Force Protection™	Available	Available	Available	Available	—
Head-Rest Method	QuietStep™ Ramp Load	QuietStep™ Ramp Load	QuietStep Ramp Load	QuietStep Ramp Load	QuietStep Ramp Load
Load/Unload Cycles	>600,000	>600,000	>600,000	>600,000	>600,000
Nonrecoverable Read Errors per Bits Read	1 per 10E14	1 per 10E14	1 per 10E14	1 per 10E14	1 per 10E14
Annualized Failure Rate (AFR)	0.48%	0.48%	0.48%	0.48%	0.48%
Power Management					
Startup Current 5V (amps max)	1.0	1.0	1.0	1.0	1.0
Power Management (W) Seek Read/Write Avg Idle/Standby Avg	1.54 2.6/2.85 0.81/0.22	1.54 2.6/2.85 0.81/0.22	1.54 2.6/2.85 0.81/0.22	1.54 2.6/2.85 0.81/0.22	1.54 2.6/2.85 0.81/0.22
Environmental					
Temperature (°C) Operating Nonoperating	0 to 60 −40 to 70	0 to 60 −40 to 70	0 to 60 −40 to 70	0 to 60 −40 to 70	0 to 60 −40 to 70
Shock (Gs) Operating: 2 ms Nonoperating: 1 ms	350 1000	350 1000	350 1000	350 1000	350 1000
Acoustics (bels—sound power) Idle Seek	2.4 2.6	2.4 2.6	2.4 2.6	2.4 2.6	2.4 2.6
Physical					
Height (in/mm)	0.374/9.5	0.374/9.5	0.374/9.5	0.374/9.5	0.374/9.5
Width (in/mm)	2.75/69.85	2.75/69.85	2.75/69.85	2.75/69.85	2.75/69.85
Depth (in/mm)	3.957/100.5	3.957/100.5	3.957/100.5	3.957/100.5	3.957/100.5
Weight (lb/kg)	0.218/98.8	0.218/98.8	0.206/93.5	0.206/93.5	0.206/93.5

1 One gigabyte, or GB, equals one billion bytes when referring to hard drive capacity.
2 Drive with G-Force Protection™ feature

www.seagate.com
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