Momentus 5400.2 120-Gbyte Family

2.5-inch storage for mainstream notebook PCs

The Freedom of Mobility and Enhanced Productivity with 5400-RPM Performance

30, 40, 60, 80, 100 and 120 Gbytes • 5400-RPM Performance • 2.5-Inch Notebook

Key Advantages

- Nearly 50 percent more performance than systems with 4200-RPM drives
- 4200-like battery consumption lets users work longer.
- Robust design and high shock tolerance enable mobility in rugged notebook operating environments.
- 900 Gs of nonoperating shock makes the drive ideal for notebook PCs and industrial applications.
- Serial ATA interface option offers blazing fast 1.5 Gbit/sec interface speed combined with NCQ for high performance.

Best-Fit Applications

- Mainstream notebook PCs
- Tablet PCs
- External 2.5-inch drives
- MP3 players
- Printers and copiers

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Seagate Makes the Best Even Better With a 5-Year Warranty

Seagate offers the industry's leading warranty to demonstrate our commitment to product reliability and our customers' success. Every Seagate internal hard drive for PCs, notebook computers and entry-level servers is covered under our unprecedented five-year warranty.

Seagate 5-Year Warranty

Native Serial ATA Interface With Native Command Queuing (NCQ)

- Blazing fast 1.5Gb/s interface speed combined with NCQ for high performance
- NCQ streamlines data delivery and gathering by resorting and queuing commands.
- Great fit for high performance/RAID configured notebooks, non-mission critical blade servers and small form factor PCs

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	120 GB[1]	100 GB[1]	80 GB[1]	60 GB[1]	40 GB[1]	30 GB[1]
Model Number	ST9120821A ST9120821AS	ST9100824A ST9100824AS	ST98823A ST98823AS	ST96812A ST96812AS	ST94813A ST94813AS	ST93811A ST93811AS
Interface (Mbytes/sec)	Ultra ATA/100 SATA/150 NCQ	Ultra ATA/100 SATA/150 NCQ	Ultra ATA/100 SATA/150 NCQ	Ultra ATA/100 SATA/150 NCQ	Ultra ATA/100 SATA/150 NCQ	Ultra ATA/100 SATA/150 NCQ
Performance						
Transfer Rate						
Sustained Internal (Mbytes/sec)	42	42	42	42	42	42
Maximum External (Mbytes/sec)	100/150	100/150	100/150	100/150	100/150	100/150
Cache, Multisegmented (Mbytes)	8	8	8	8	8	8
Average Seek (msec)	12.5	12.5	12.5	12.5	12.5	12.5
Average Latency (msec)	5.6	5.6	5.6	5.6	5.6	5.6
Performance Level	5400	5400	5400	5400	5400	5400
Configuration/Organization						
Discs/Heads	2/4	2/4	2/3	1/2	1/2	1/1
Bytes per Sector	512	512	512	512	512	512
Logical CHS	16,383/16/63	16,383/16/63	16,383/16/63	16,383/16/63	16,383/16/63	16,383/16/63
Recording Method	RLL 0, 11	RLL 0, 11	RLL 0, 11	RLL 0, 11	RLL 0, 11	RLL 0, 11
Reliability/Data integrity						
Head-Rest Method	QuietStep™ Ramp Load	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	600,000
Nonrecoverable Read Errors per Bits Read	1 per 10^{14} bits read	1 per 10^{14} bits read	1 per 10^{14} bits read	1 per 10^{14} bits read	1 per 10^{14} bits read	1 per 10^{14} bits read
Power Management						
Startup Current 5v (amps max)						
PATA	1.0	1.0	1.0	1.0	1.0	1.0
SATA	1.1	1.1	1.1	1.1	1.1	1.1
Power Mgmt (watts)						
Seek PATA	2.0	2.0	2.0	2.0	2.0	2.0
SATA	2.2	2.2	2.2	2.2	2.2	2.2
Read/Write PATA	1.8/1.8	1.8/1.8	1.8/1.8	1.8/1.8	1.8/1.8	1.8/1.8
SATA	1.9/2.3	1.9/2.3	1.9/2.3	1.9/2.3	1.9/2.3	1.9/2.3
Idle/Standby PATA	.80/.26	.80/.26	.80/.26	.80/.26	.80/.26	.80/.26
SATA	.80/.28	.80/.28	.80/.28	.80/.28	.80/.28	.80/.28
Environmental						
Temperature, Operating (°C)	5 to 55	5 to 55	5 to 55	5 to 55	5 to 55	5 to 55
Temperature, Nonoperating (°C)	−40 to 70	−40 to 70	−40 to 70	−40 to 70	−40 to 70	−40 to 70
Shock, Operating: 2 msec (Gs)	250	250	250	250	250	250
Shock, Nonoperating: 1 msec (Gs)	900	900	900	900	900	900
Acoustics (bels—sound power)						
Idle	2.4	2.4	2.4	2.4	2.4	2.4
Performance Seek	2.9	2.9	2.9	2.9	2.9	2.9
Physical						
Height (in/mm)	.374/9.5	.374/9.5	.374/9.5	.374/9.5	.374/9.5	.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	2.75/69.85
Depth (in/mm)						
PATA	3.945/100.2	3.945/100.2	3.945/100.2	3.945/100.2	3.945/100.2	3.945/100.2
SATA	3.957/100.5	3.957/100.5	3.957/100.5	3.957/100.5	3.957/100.5	3.957/100.5
Weight (lb/g)	.22/100	.22/100	.22/100	.22/100	.22/100	.22/100

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