

Data Sheet

EE25.1 Series

2.5-inch drives designed for extreme environments

20, 30 and 40 GB • 2.5 Inch • Ultra ATA

Key Advantages

- Extends HDD operating temperatures from as low as -30°C to as high as $+85^{\circ}\text{C}$, enabling reliable data storage in applications from Scandinavia to the Sahara desert
- Designed from the ground up for extreme environments
- Delivers maximum reliability in high vibration and high humidity conditions
- Protects data during the sudden shocks of operating in vehicles, ruggedized laptops and other situations requiring maximum robustness
- Built for reliable operation in 24x7, 8760 hours-per-year environment

Best-Fit Applications

- Entertainment, information and navigation systems for automobiles, marine vessels, commercial aircraft and recreational vehicles
- Ruggedized laptop PCs
- Military, industrial and commercial equipment exposed to vibration and temperature extremes
- Outdoor and mobile surveillance applications



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2.5-inch drives designed for extreme environments



- Choose the right temperature capability for your product's requirements: -30°C to +85°C or -20°C to +75°C.
- 24x7 operational capability with 550,000 MTBF
- Virtually inaudible operation through Seagate SoftSonic™ technology
- Seagate RunOn™ technology delivers consistent performance even in high-motion conditions.
- Three-year production cycle for each product generation
- G-Force Protection™ protects the drive against everyday shock events while in the field or on the road.
- Estimated ten-year service life delivers reliable operation for years to come.

Seagate Design Service Centers

- Offers the expertise of Seagate HDD integration engineers to overcome the challenges of building new system chassis and HDD mounting designs
- Speeds time to market by solving CE design issues quickly and efficiently
- Improves system reliability and performance
- Field engineering and business support teams are available in person, worldwide.
- Advanced application design services are available through Seagate design centers in the USA and Singapore.

Seagate Service Centers—Worldwide Support

- Presales and technical support at 1-800-SEAGATE
- Free technical support for the life of the product
- Expert email support and complete historical web content available online
- Certified, experienced support staff
- Rated "Above Average to Excellent" by 95 percent of our customers

www.seagate.com
1-800-SEAGATE
(1-800-732-4283)

Specifications	40GB ¹	30GB ¹	20GB ¹
Model Number	ST940813AM ² ST940814AM ³	ST930813AM ² ST930814AM ³	ST920813AM ² ST920814AM ³
Interface Options	ATA	ATA	ATA
Performance			
Spindle Speed (RPM)	5400	5400	5400
Power On/Standby to Ready (sec, typical, -20°C to 85°C)	3	3	3
Average Latency (msec)	5.6	5.6	5.6
Seek Time (msec, typical)			
Average Read	12.5	12.5	12.5
Average Write	14.5	14.5	14.5
Cache, Multisegmented (MB)	8	8	8
Environmental			
Temperature (°C, ambient)			
Operating	-30 to +85 ²	-30 to +85 ²	-30 to +85 ²
Nonoperating	-20 to +75 ³ -40 to +95	-20 to +75 ³ -40 to +95	-20 to +75 ³ -40 to +95
Acoustics (bels, typical)			
Idle	2.3	2.3	2.3
Normal Seek	2.5	2.5	2.5
Humidity (%)			
Operating	5 to 90	5 to 90	5 to 90
Nonoperating	5 to 95	5 to 95	5 to 95
Altitude (ft/m, sea level)			
Operating	-1000 to 16,400/-305 to 5000 -1000 to 40,000/-305 to 12,192		
Nonoperating			
EMI/EMC	FCC Class B compliant/CISPR25 Tested		
Power Management			
Startup Current 5V (typical, amps)	1.0	1.0	1.0
Power Management (typical, watts)			
Seek	1.9	1.9	1.9
Read/Write	1.9/1.7	1.9/1.7	1.9/1.7
Idle	0.99	0.99	0.99
Standby/Sleep	0.26	0.26	0.26
Voltage Tolerance	5V ± 5%	5V ± 5%	5V ± 5%
Reliability/Data Integrity			
Shock (Gs)			
Operating: 11 msec/2 msec	110/200	110/200	110/200
Nonoperating: 2 msec	800	800	800
Vibration (Gs, 0 to peak)			
Operating (10 to 200 Hz)	2.0	2.0	2.0
Operating (200 to 500 Hz)	1.0	1.0	1.0
Nonoperating (5 to 500 Hz)	5.0	5.0	5.0
Mean Time Between Failures (hours)	550,000	550,000	550,000
Warranty			
Standard (years)	1	1	1
Option (add'l years)	up to 4	up to 4	up to 4
Physical			
Discs/Heads	1/2	1/2	1/2
Height (in/mm)	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
Depth (in/mm)	3.95/100.2	3.95/100.2	3.95/100.2
Weight (lb/g)	0.22/100	0.22/100	0.22/100

¹ One gigabyte, or GB, equals one billion bytes when referring to hard drive capacity.

² OEM model

³ Aftermarket model

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