

Data Sheet

EE25.2 Series™

Designed for reliable performance
in extreme environments

40 GB and 80 GB • 2.5 Inch • PATA and SATA

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
- Ability to operate at extreme altitude, to 18,100 feet (5500 meters)
- Delivers maximum reliability in high vibration and high humidity conditions
- Protects data during the sudden shocks of operating in vehicles, ruggedized computers and other situations requiring maximum robustness
- Built for reliable operation in 24x7, 8760 hours-per-year environment
- Industry best-in-class 1-million-hour MTBF
- Capable of 2 Gs vibration at 5Hz to 500Hz

Best-Fit Applications

- Entertainment, information and navigation systems for automobiles, marine vessels, and military and commercial aircraft
- Ruggedized laptop PCs
- Military, municipal and civil equipment exposed to vibration and temperature extremes
- Commercial/industrial control systems
- Ruggedized mobile and outdoor surveillance
- Digital signage
- Medical devices



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Designed for reliable performance in extreme environments



- Choose the right temperature capability for your product's requirements: –30°C to +85°C (Extreme model) or –20°C to +75°C (Rugged model)
- Virtually inaudible operation through Seagate SoftSonic™ technology

Seagate Customer Experience Engineering

- 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 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™ to help migrate data from an older drive.
- Seagate also offers multi-lingual phone, email and chat support.

www.seagate.com

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

Specifications	80 GB ¹	40 GB ¹
Model Number	ST980817AM ² ST980817SM ² ST980818AM ³ ST980818SM ³	ST940817AM ² ST940817SM ² ST940818AM ³ ST940818SM ³
Interface Options	ATA SATA	ATA SATA
Performance		
Spindle Speed (RPM)	5400	5400
Power On/Standby to Ready (sec, typical/max, –20°C to 85°C)	3.0/4.0	3.0/4.0
Average Latency (msec)	5.6	5.6
Random Seek Time, Avg. Read (ms, typical)	13.0	13.0
Cache, Multisegmented (MB)	8	8
Environmental		
Temperature (°C, ambient)		
Operating	–30 to +85 ² –20 to +75 ³	–30 to +85 ² –20 to +75 ³
Nonoperating	–40 to +95	–40 to +95
Max. Case (°C)	+95 ² , +85 ³	+95 ² , +85 ³
Gradient (°C, min.)	3	3
Humidity, Relative (%)		
Operating	5 to 90	5 to 90
Nonoperating	5 to 95	5 to 95
Altitude (m)		
Operating (up to 85°C)	5500	5500
Nonoperating	12,192	12,192
Acoustics (bels, typical)		
Idle	1.9	1.9
Seek	2.1	2.1
Reliability/Data Integrity		
Shock (Gs)		
Operating: 11 ms	150	150
Operating: 2 ms	300	300
Nonoperating: 1 ms	900	900
Vibration (Gs, 5 to 500 Hz)		
Operating	2.0	2.0
Nonoperating	5.0	5.0
Load/Unload Cycles (Soft/Hard)		
25°C	1.2M/100K	1.2M/100K
–30°C to 85°C ²	300K/100K ²	300K/100K ²
–20°C to 75°C ³	300K/100K ³	300K/100K ³
Power-On Hours (annual)	8760	8760
MTBF (hours)	1,000,000	1,000,000
Physical		
Height (in/mm)	0.374/9.5	0.374/9.5
Width (in/mm)	2.75/69.85	2.75/69.85
Depth (in/mm)	3.95/100.2	3.95/100.2
Weight (lb/g)	0.22/98.0	0.22/98.0

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

² Extreme model

³ Rugged model

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