

Data Sheet

## EE25 Series 5400.2

Designed for reliable performance  
in extreme environments

**30, 40, 60, 80 GB • 2.5 Inch • PATA and SATA**

### Key Advantages

- Extends HDD operating temperatures from as low as  $-30^{\circ}\text{C}$  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 16,400 feet (5000 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

### Best-Fit Applications

- Entertainment, information and navigation systems for automobiles, marine vessels, and military or and commercial aircraft
- Ruggedized laptop PCs
- Military, municipal and civil equipment exposed to vibration and temperature extremes
- Commercial/industrial control systems
- Mobile or remote CCTV systems



# EE25 Series 5400.2

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 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 Global Customer Support

- Get presales and technical support at [support.seagate.com](http://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](http://www.seagate.com)

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

Specifications	80 GB <sup>1</sup>	60 GB <sup>1</sup>	40 GB <sup>1</sup>	30 GB <sup>1</sup>
<b>Model Number</b>	ST980817AM <sup>2</sup> ST980817SM <sup>2</sup> ST980818AM <sup>3</sup> ST980818SM <sup>3</sup>	ST960817AM <sup>2</sup> ST960817SM <sup>2</sup> ST960818AM <sup>3</sup> ST960818SM <sup>3</sup>	ST940817AM <sup>2</sup> ST940817SM <sup>2</sup> ST940818AM <sup>3</sup> ST940818SM <sup>3</sup>	ST930817AM <sup>2</sup> ST930817SM <sup>2</sup> ST930818AM <sup>3</sup> ST930818SM <sup>3</sup>
<b>Interface Options</b>	ATA SATA	ATA SATA	ATA SATA	ATA SATA
<b>Performance</b>				
<b>Spindle Speed (RPM)</b>	5400	5400	5400	5400
<b>Power On/Standby to Ready (sec, typical/max, -20°C to 85°C)</b>	3.0/4.0	3.0/4.0	3.0/4.0	3.0/4.0
<b>Average Latency (msec)</b>	5.5	5.5	5.5	5.5
<b>Random Seek Time, Avg. Read (ms, typical)</b>	11.0	11.0	11.0	11.0
<b>Cache, Multisegmented (MB)</b>	8	8	8	8
<b>Environmental</b>				
<b>Temperature (°C, ambient)</b>				
<b>Operating</b>	-30 to +85 <sup>2</sup> -20 to +75 <sup>3</sup>	-30 to +85 <sup>2</sup> -20 to +75 <sup>3</sup>	-30 to +85 <sup>2</sup> -20 to +75 <sup>3</sup>	-30 to +85 <sup>2</sup> -20 to +75 <sup>3</sup>
<b>Nonoperating</b>	-40 to +95 <sup>2</sup> -40 to +85 <sup>3</sup>	-40 to +95 <sup>2</sup> -40 to +85 <sup>3</sup>	-40 to +95 <sup>2</sup> -40 to +85 <sup>3</sup>	-40 to +95 <sup>2</sup> -40 to +85 <sup>3</sup>
<b>Max. Case (°C)</b>	+95 <sup>2</sup> , +85 <sup>3</sup>	+95 <sup>2</sup> , +85 <sup>3</sup>	+95 <sup>2</sup> , +85 <sup>3</sup>	+95 <sup>2</sup> , +85 <sup>3</sup>
<b>Gradient (°C, min.)</b>	3	3	3	3
<b>Humidity, Relative (%)</b>				
<b>Operating</b>	5 to 90	5 to 90	5 to 90	5 to 90
<b>Nonoperating</b>	5 to 95	5 to 95	5 to 95	5 to 95
<b>Altitude (m)</b>				
<b>Operating (at 75°C)</b>	5000	5000	5000	5000
<b>Operating (at 85°C)</b>	4500	4500	4500	4500
<b>Nonoperating</b>	15,000	15,000	15,000	15,000
<b>Acoustics (bels, typical)</b>				
<b>Idle</b>	2.2	2.2	2.2	2.2
<b>Seek</b>	2.5	2.5	2.5	2.5
<b>Reliability/Data Integrity</b>				
<b>Shock (Gs)</b>				
<b>Operating: 11 ms</b>	150	150	150	150
<b>Operating: 2 ms</b>	300	300	300	300
<b>Nonoperating: 1 ms</b>	900	900	900	900
<b>Vibration (Gs, 5 to 500 Hz)</b>				
<b>Operating</b>	2.0	2.0	2.0	2.0
<b>Nonoperating</b>	5.0	5.0	5.0	5.0
<b>Load/Unload Cycles</b>				
<b>25°C (Soft/Hard)</b>	1.2M/100K	1.2M/100K	1.2M/100K	1.2M/100K
<b>&lt;25°C to &gt;50°C</b>	>600K	>600K	>600K	>600K
<b>Power-On Hours (annual)</b>	8760	8760	8760	8760
<b>MTBF (hours)</b>	750,000	750,000	750,000	750,000
<b>Physical</b>				
<b>Height (in/mm)</b>	0.374/9.5	0.374/9.5	0.374/9.5	0.374/9.5
<b>Width (in/mm)</b>	2.75/69.85	2.75/69.85	2.75/69.85	2.75/69.85
<b>Depth (in/mm)</b>	3.95/100.2	3.95/100.2	3.95/100.2	3.95/100.2
<b>Weight (lb/g)</b>	0.22/102.0	0.22/102.0	0.22/102.0	0.22/102.0

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

<sup>2</sup> Extreme model

<sup>3</sup> Rugged model

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