

# Mobile SATA Spinpoint M5S



Capacity		60GB	80GB	120GB	160GB	250GB
Model	8 MB	HM061GI	HM080GI	HM121HI	HM160HI	HM250J

## FEATURES

- Max. 160GB formatted capacity per disk
- SATA Native Command Queuing Feature
- TuMR/PMR head with FOD technology
- Serial ATA 1.5Gbps Interface Support
- Load/Unload Head Technology
- ATA Security Mode Feature Set
- ATA S.M.A.R.T. Feature Set
- SilentSeek™
- NoiseGuard™

### DRIVE CONFIGURATION

Capacity	60GB/80GB/120GB/160GB/250GB
Interface	SATA 1.5Gbps
Buffer DRAM Size <sup>2</sup>	8 MB
Byte per Sector	512
Rotational Speed	5,400 RPM

### PERFORMANCE SPECIFICATIONS

Average Seek time (typical)	12 ms
Average Latency	5.6 ms
Data Transfer Rate	
Media to/from Buffer (Max.)	250GB : 740Mbits/s 60,80,120,160GB : 826Mbits/s
Buffer to/from Host (Max.)	150MB/s
Drive Ready Time (typical) <sup>3</sup>	4 sec

### RELIABILITY SPECIFICATIONS

Non-recoverable Read Error	1 sector in 10 <sup>14</sup> bits
Controlled Ramp Load/Unload	600,000

### ACOUSTICS

Idle (typical)	60,80,120,160GB : 2.2 Bel 250GB : 2.4Bel
Performance Seek (typical)	60,80,120,160GB : 2.4 Bel 250GB : 2.6Bel

### POWER REQUIREMENTS

Voltage	+5V±5%
Spin-up Current (Max.)	900 mA
Seek (typical) <sup>4</sup>	2.2 W
Read/Write (typical)	2.0 W
Low Power Idle (typical)	0.6 W
Standby (typical)	0.25 W
Sleep (typical)	0.2 W

### ENVIRONMENTAL SPECIFICATIONS

<b>Temperature</b>	
Operating	5 ~ 55 °C
Non-operating	-40 ~ 70 °C
<b>Humidity (non-condensing)</b>	
Operating	5 ~ 90 %
Non-operating	5 ~ 95 %
<b>Linear Shock (1/2 sine pulse)</b>	
Operating(2ms)	325 G
Non-operating(1ms)	1000 G
<b>Vibration</b>	
Operating(10~500Hz)	0.7Grms
<b>Altitude (relative to sea level)</b>	
Operating	-300 to 3000 m
Non-operating	-400 to 15000 m

### PHYSICAL DIMENSION

Height (Max.)	9.5 mm
Width	69.85 mm
Length	100 mm
Weight (avg.)	98 g

\* Note : Design and specifications are subject to change without prior notice.

1.1MB = 1,000,000 Bytes, 1GB = 1 Performance Seek 2.1 Bel

Accessible capacity may vary as some OS uses binary numbering system for reported capacity

2 Upper 128 KB is used for firmware

3 Power-On to Drive Ready

4 30% duty cycle, random seek

5 Power requirements based on enabled DIPM & 1.5Gbps speed

6 Unless otherwise specified, specifications are for 250GB configuration

