Mobile SATA Spinpoint M8_Preliminary



Capacity Model

320GB 500GB HN-M320MBB HN-M500MBB

1TB 750GB HN-M750MBB HN-M101MBB

FEATURES

- Max. 500GB formatted capacity per disk
- SATA Native Command Queuing Feature
- TuMR/PMR head with FOD technology
- Serial ATA 3.0Gbps Interface Support
- · Load/Unload Head Technology

| DRIVE CONFIGURATION | |
|---|-------------------------|
| Capacity ¹ | 320 / 500 / 750GB / 1TB |
| Interface | SATA 3.0Gbps |
| Buffer DRAM Size ² | 8 MB |
| Rotational Speed | 5,400 RPM |
| | |
| PERFORMANCE SPECIFICATIONS | |
| Average Seek time (typical) | 12 ms |
| Data Transfer Rate | |
| Buffer to/from Host (Max.) | 300MB/s |
| Drive Ready Time (typical) ³ | 4 sec |

RELIABILITY SPECIFICATIONS Non-recoverable Read Error <1 sector in 10¹⁴ bits

Load/Unload Cycles(Ambient) 600,000

ACOUSTICS

| Idle (typical) | 2.4 Bel |
|----------------------------|---------|
| Performance Seek (typical) | 2.6 Bel |

POWER REQUIREMENTS Voltage

| Spin-up Current (Max.) | 1000 mA |
|--------------------------|---------|
| Seek (avg.) ⁴ | 2.0 W |
| Read/Write (avg.) | 2.5 W |
| Low Power Idle (avg.) | 0.7 W |
| Standby (avg.) | 0.2 W |
| Sleep (avg.) | 0.2 W |

- ATA Security Mode Feature Set
- ATA S.M.A.R.T. Feature Set
- SilentSeek[™]
- NoiseGuard™

+5V±5%

| ENVIRONMENTAL SPECIFICATIONS | |
|----------------------------------|-----------------|
| Temperature | |
| Operating | 5 ~ 55 ℃ |
| Non-operating | -40 ~ 70 °C |
| Humidity (non-condensing) | |
| Operating | 5 ~ 90 % |
| Non-operating | 5 ~ 95 % |
| Linear Shock (1/2 sine pulse) | |
| Operating(2ms) ⁵ | 325 G |
| Non-operating(1ms) | 900 G |
| Vibration | |
| Operating(Random,10~500Hz) | 1.5 Grms |
| Altitude (relative to sea level) | |
| Operating | -300 to 3000 m |
| Non-operating | -400 to 15000 m |

| PHYSICAL DIMENSION | |
|--------------------|----------|
| Height | 9.5 mm |
| Width | 69.85 mm |
| Length | 100.3 mm |
| Weight (max.) | 107 g |

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

1.1MB = 1,000,000 Bytes, 1GB = 1,000,000,000 Bytes

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

 $2\,$ A small portion of the 8MB buffer memory is reserved for firmware use

3 Power-On to Drive Ready

4 30% duty cycle, random seek

5. On Track Read Operation

