

Spinpoint M40 series

40.0/60.0/80.0GB



- 40GB Formatted Capacity Per Disk
- GMR head technology with wireless suspension design
- Ultra ATA-100 Interface
- Fluid Dynamic Bearing Spindle Motor Technology
- Load/Unload Head Technology
- ATA Security Mode Feature Set
- ATA SMART Feature Set
- ATA Automatic Acoustic Management Feature Set
- ATA 48-bit Address Feature Set
- ATA Device Configuration Overlay Feature Set
- Multi-Burst On-The-Fly Error Correction
- SilentSeek™

Capacity ¹	40GB	60GB	80GB
Model	MP0402H	MP0603H	MP0804H

DRIVE CONFIGURATION

Interface	ATA 6
Buffer DRAM Size ¹	8 Mbytes
Bytes per Sector	512

PERFORMANCE SPECIFICATIONS

Read Seek Time (typ.)	
-Track to Track	2 ms
-Average	12 ms
-Full Stroke	22 ms
-Average Latency	5.6 ms
-Rotational Speed	5,400 rpm
Data Transfer Rate	
-Media to/from Buffer (max.)	431Mb/s
-Buffer to/from Host (max.)	100MB/s
-Drive Ready Time (typ.) ²	4 sec

RELIABILITY

SPECIFICATIONS	
Non-recoverable Read Error	1 sector in 10 ¹⁴ bits
MTBF	330,000 POH
Controlloed Ramp L/UL	600000
Component Design Life	5 years

ACOUSTICS (AVERAGE SOUND POWER)

Idle	1-Disk	2.2 Bel
	2-Disk	2.4 Bel
Random Read/Write	1-Disk	2.4 Bel
	2-Disk	2.6 Bel

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



ENVIRONMENTAL SPECIFICATIONS

Temperature	
-Operating	5 – 55 °C
-Non-operating	-40 – 70 °C
Humidity (non-condensing)	
-Operating	5 – 90 %
-Non-operating	5 – 95 %
Linear Shock (1/2 sine pulse)	
-Operating, 2ms	300G
-Non-operating, 1ms	900G
Vibration (swept sine, 1/4 octave per minute)	
Operating	-5 – 500 Hz 1.0 G _{o-p}
Non-operating	-10 – 21 Hz 0.195 in(double amp)
	-21 – 500Hz 5 G _{o-p}
	-500–800Hz 3 G _{o-p}
Altitude (relative to sea level)	
Operating	-1000 to 10000 ft
Non-operating	-1400 to 50000 ft

POWER REQUIREMENTS

Voltage	+5V±5%
Spin Up Current (max.)	5.0 W
Seek (typ.) ³	2.4 W
Read/Write On-Track (typ.)	2.4 W
Low Power Idle (typ.)	0.85 W
Standby (typ.)	0.25 W
Sleep (typ.)	0.1 W

PHYSICAL DIMENSION

Height	0.37 in
Width	3.94 in
Depth	2.75 in
Weight	0.22 lb

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

1. Upper 128 KB is used for firmware

2. Power-On to Drive Ready

3. 30% duty cycle, random seek

* Unless otherwise specified, specifications are for 2-disk configuration