

SpinPoint™

V

40 Series

20.0/40.0/60.0/80.0GB



## SAMSUNG HARD DISK DRIVE

- 3.5-inch High Performance Hard Drives
- 40.0GB Formatted Capacity Per Disk
- 5,400rpm Spindle Speed
- Ultra DMA/100 Compatible
- S.M.A.R.T. Compliant
- NoiseGuard™
- SilentSeek™
- ImpacGuard™

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# V40

Series

- 3.5-inch High Performance Hard Drives
- 40.0GB Formatted Capacity Per Disk
- 5,400rpm Spindle Speed
- Ultra DMA/100 Compatible
- High Speed Digital Signal Processor Based Architecture
- S.M.A.R.T. Compliant
- Support Security Mode feature set
- Support Host Automatic Acoustic Management(AAM)
- NoiseGuard™- Acoustic Noise Suppression Technology
- SilentSeek™
- ImpacGuard™

Model	SV2001H	SV4002H	SV6003H	SV8004H
Capacity	20.0GB	40.0GB	60.0GB	80.0GB
Heads	1	2	3	4
Disks	1	1	2	2

\*1GB=10<sup>9</sup>Bytes



## Drive Configuration

Interface	ATA-6 compatible/Ultra DMA/100
Spindle Speed(RPM)	5,400±0.1%
Buffer Size	2MB

## Performance Specifications

Read Seek Time (typical, read)	
Track to Track	0.8 ms
Average	8.9 ms
Full Stroke	16.9ms
Average Latency	5.56ms
Data Transfer Rate	
Media to/from Buffer(max.)	443 Mbits/s
Buffer to/from Host (max.)	100 Mbytes/s
Drive Ready Time(typical)	7 sec

## Reliability Specifications

Non-recoverable Read Error	1 in 10 <sup>14</sup> bits
MTBF (POH)	500,000 hours
Start/Stop Cycles	50,000
Component Design Life	5 years

## Environmental Specifications

Temperature	
Operating	5 ~ 55°C
Non-operating	-40 ~ 70°C
Thermal Gradient (max.)	20°C/hr
Humidity (non-condensing)	
Operating	5 ~ 85 %
Non-operating	5 ~ 95 %
Altitude (relative to sea level )	
Operating	-650 to 10,000 feet
Non-operating	-1,000 to 40,000 feet

## Shock and Vibration

Linear Shock (1/2 sine pulse, 2 ms duration)	
Operating	63 G
Non-operating	350 G
Vibration (swept sine)	
Operating (1 octave per minute)	
5 ~ 21 Hz	0.034" (double amplitude)
22 ~ 300 Hz	1.5 Gp-p
Non-operating(1 octave per minute)	
5 ~ 21 Hz	0.195" (double amplitude)
22 ~ 500 Hz	8 Gp-p

## Acoustic Noise

Sound Power (average)	
Idle	< 2.9 bels
Random Read/Write	3.0bels

## Power Consumption (typical)

Voltage	5V ± 5% / 12V ± 10%
Power Up Current(max.)	750 / 2060mA
Read/Write	4.5W
Seek	6.0W
Idle	4.8W
Standby	0.5W
Sleep	0.5W

## Physical Dimension

Height	1 inch
Width	4 inches
Depth	5.75 inches
Weight	1.4 pounds

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## Contact

Website: [www.samsunghdd.com](http://www.samsunghdd.com) & [www.samsunghdd.co.kr](http://www.samsunghdd.co.kr)

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