

2.5 inch ATA-5 hard disk drives  
Capacities: 6, 10 & 20 GB

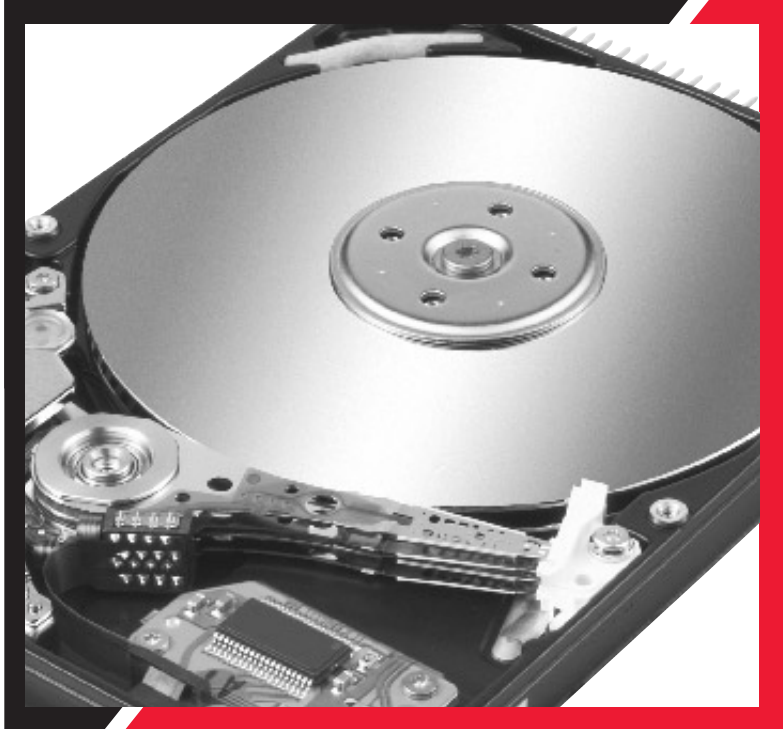
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## Hitachi DK23BA series hard disk drives

### Highlights

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- ▶ **17.2 GBits/in<sup>2</sup>**
- ▶ **6, 10, 20 GB in 9.5mm high package for maximum capacity  
slimline notebooks**
- ▶ **ATA-5 interface with 512 kB or 2048kB read/write cache**
- ▶ **GMR head and MEEPRML read channel technology**
- ▶ **32-bit RISC microprocessor, Shock sensor, SMART**



## Hitachi DK23BA series specifications

Product	Hitachi DK23BA series		
Model	DK23BA-20	DK23BA-10	DK23BA-60
<b>Performance</b>			
Total Capacity			
Formatted	20.00 GB	10.06 GB	6.01 GB
Per Sector	512	512	512
Number of Cylinders	22600	22600	22600
Number of Disks	2	1	1
Number of Heads	4	2	2
Seek Time (Nominal)			
1 Track	3ms	3ms	3ms
Average	12ms	12ms	12ms
Full Track	24ms	24ms	24ms
Average Latency	7.1ms	7.1ms	7.1ms
Rotational Speed	4,200 RPM	4,200 RPM	4,200 RPM
Read Technology	MEEPRML, ID-Less Format		
Internal Transfer Rate	14.1-24.8 MB/s	14.1-24.8 MB/s	11.4-20.2 MB/s
Recording Density	458,000 bpi	458,000 bpi	373,000 bpi
Track Density	37,600 tpi	37,600 tpi	37,600 tpi
Interface Transfer Rate	16.6 MB/s max. (PIO mode 4/Multiword DMA mode 2) / 66.6 MB/s max. (Ultra DMA mode 4)		
Data Buffer	2048 kB	512 kB	512 kB
<b>Physical Specifications</b>			
Dimensions			
Height	9.5 mm	9.5 mm	9.5 mm
Width	70 mm	70 mm	70 mm
Depth	100 mm	100 mm	100 mm
Weight	95 g	95 g	91 g
Power Requirements +5V +/-5%			
Seek	0.45 A (2.25W)	0.45 A (2.25W)	0.45 A (2.25W)
Spin-up	0.90 A (4.5W)	0.90 A (4.5W)	0.90 A (4.5W)
Idle	0.13 A (0.65W)	0.13 A (0.65W)	0.13 A (0.65W)
Read/Write	0.40 A (2.0W)	0.40 A (2.0W)	0.40 A (2.0W)
Sleep	0.020 A (0.1W)	0.020 A (0.1W)	0.020 A (0.1W)
Stand-by	0.050 A (0.25W)	0.050 A (0.25W)	0.050 A (0.25W)
Temperature			
Operating	5° to 55°C (41° to 131°F)		
Non-Operating	-40° to 70°C (-40° to 158°F)		
<b>Environmental Conditions</b>			
Relative Humidity			
Operating	5% to 90%		
Non-Operating	5% to 95%		
Max. Wet Bulb	29°C (84.2°F non-condensing)		
Shock			
Operating	180G or less, 2ms half sine wave		
Non-Operating	800 G or less, 1 ms half sine wave		
Vibration			
Operating	1.0G or less (22-500Hz)		
Non-Operating	5G or less (22-500Hz)		
Acoustic Noise			
Idle	25 dBA (typ.)	25 dBA (typ.)	25 dBA (typ.)
<b>Reliability</b>			
Preventive Maintenance	Not Required		
Error Rate (Unrecoverable Errors)	Less than 1 per 10 <sup>13</sup> bits read		
<b>Identify Device Information for Setup (Addressing)</b>			
Word 1 Number of CYL.	16383 (3FFFh)	16383 (3FFFh)	12416(3080h)
Word 3 Number of HD	16 (0010h)	16 (0010h)	15 (00Fh)
Word 6 Number of SPT	63 (3Fh)	63 (3Fh)	63 (3Fh)
Word 60 61 Total LBA	39070080(02542980h)	19640880(012BB230h)	11733120(B30880h)

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### For more information

#### Internet:

- [www.hgst.com](http://www.hgst.com)

#### For other Hitachi products:

- 1 800 HITACHI (800 448 2244)

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