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| 2.5" 270, 405 and 540 MB DISK DRIVE |
|           MODELS                     |
|           DHAA-2270, -2405, -2540   |
|           DHAS-2270, -2405, -2540   |
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AN OEM OFFERING FROM IBM
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The latest in IBM's 2.5-inch line features the industry's highest capacity in a notebook product, with 540 MB available in a 2 platter design. IBM's industry-leading Magneto-Resistive (MR) head technology used in these devices offers enhanced performance and value with outstanding reliability.

As the key capacity points move up in the desktop PC market, users of notebooks want to replicate their desktop system. These standard setting capacities for 2.5-inch drives offer an outstanding solution. The higher areal density gives a higher average data rate with reduced "tail-off" on the inner bands.

Performance is further enhanced by a 64 KB segmented buffer with write-cache and read look ahead.

The drives support both AT (IDE) at 8.3 MB/sec and Fast-SCSI-2 at 10 MB/sec. The AT drives support LBA mode and extended cylinder addressing. In addition to the low power ratings, the drives also support AT and SCSI power management commands for "green PC" applications.

QUALITY AND AVAILABILITY
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Advanced worldwide manufacturing facilities provides multisite, high-volume production capability.

HIGHLIGHTS

- MR head technology
- 17 mm high
- AT (IDE) and SCSI-2F interfaces
- 3800 RPM
- 14 msec average seek
- 8.3 MB/sec data rate (AT)
- 10.0 MB/sec data rate (SCSI-2)
- 300,00 poh MTBF
- Low power for extended notebook battery life

PRODUCT DESCRIPTION

2 1/2-Inch 270, 405 and 540 MB
Disk Drive

Configuration	
Interface	AT/SCSI-2F
Device Capacity	
Formatted	270/405/540 MB (1)
Sector Size	512 Bytes
Recording Zone	8
User Cylinders	2788

Data Heads	2/3/4	
Disks	1/2/2	
Areal Density (max)	493 Mb/sq in	
Recording Density (max)	93,100 BPI	
Track Density	5300 TPI	
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Performance		
Rotational Speed	3800 RPM	
Media Transfer Rate	24.5-35.8 Mbits/sec	
Data Buffer	Read 32 KB/Write 32 KB	
Interface Transfer Rate (Max)		
AT	8.3 MB/sec	
SCSI	10.0 MB/sec (sync)	
Latency		
Average	7.9 msec	
Seek Time (Typical)		
Average (Read)	14 msec	
Track to Track	4.0 msec	
Full Track	23 msec	
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Reliability		
MTBF		
Projected power-on hours	300,000	
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Power		
Requirements	+5 VDC plus or minus 5%	
Dissipation (Typical)		
Start Up (Maximum Peak)	4.7 Watts	
Seek	2.0 Watts	
Read/Write	2.8 Watts	
Idle	1.2 Watts	
Standby	0.4 Watts	
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Physical Size		
Height	17 mm	
Width	70 mm	
Depth	100 mm	
Weight	180 g	
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Environmental Characteristics	Operating	Non-Operating
Ambient Temperature	5 to 55 degrees C	-40 to 65 degrees C
Relative Humidity		
Non-Condensing	8% to 90%	5% to 95%
Maximum Wet Bulb		
Non-Condensing	29.4 degrees C	40 degrees C
Shock		
Half Sinewave	20 G/3 msec	250 G/2 msec
Vibration		
Random (RMS)	0.67 G (5-500 Hz)	1.04 G (2-200 Hz)
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(1) 1 MB-1,000,000 bytes

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