

2 1/2-INCH 172, 258 and 344 MB LOW PROFILE DISK DRIVES
MODELS H2172, H2258 and H2344

AN OEM OFFERING FROM IBM

These models of ADSTAR's* OEM 2 1/2-inch disk drives extend the capacity storage options for laptop and notebook computers. Models H2172-A2, H2258-A3 and H2344-A4 are AT*-attached Models H1172-S2, H2258-S3 and H2344-S4 are SCSI-attached.

With this drive family, ADSTAR brings to market the first 2 1/2-inch drives to take advantage of IBM's industry-leading Magneto-Resistive (MR) head technology that enables an average areal density of 322 megabytes per square inch, higher than any other drive currently available in their class. The resulting reduction in the number of heads and disks required provides exceptional reliability, with a projected MTBF of 300,000 power-on hours.

All models feature an average seek time of 14 ms, and contain all the drive and controller electronics in a slim 17 mm, 2 1/2-inch form factor.

QUALITY AND AVAILABILITY

Worldwide IBM manufacturing facilities can provide drives in volume quantities when and where you want them.

HIGHLIGHTS

- 172, 258 and 344 MB capacity
- Magneto-Resistive head technology
- 250 G non-operating shock
- Slim form factor (17 mm height)
- ECC on the fly
- Zone Bit Recording
- 300,000 power-on hours MTBF
- Mounts in all six directions
- Dedicated head landing zone
- Automatic actuator lock
- 64 KB segmented data buffer
- SCSI and AT attachment

PRODUCT DESCRIPTION

2 1/2" 172, 258 and
344 MB Disk Drives

Configuration	
Interface	SCSI/AT)
Device Capacity	
Formatted	172/258/344 MB (1)
Sector Size	512 Bytes
Recording Zones	8
User Cylinders	2264
Data Heads	2/3/4
Disks	1/2/2
Areal Density	
Average	322 Mb/sq in
Recording Density	
Maximum	74800 BPI
Track Density	4300 TPI

Performance		
Rotational Speed	3800 RPM	
Media Transfer Rate	20.0 (Inner), 32.0 (Outer) Mbits/sec	
Data Buffer	Read 32 KB/Write 32 KB	
Interface Transfer Rate (Max)		
AT	6.0 MB/sec	
SCSI	4.5 msec	
Latency		
Average	7.9 msec	
Seek Time (Typical)		
Average (Read)	14 msec	
Track to Track	4.0 msec	
Full Track	23 msec	
Reliability		
MTBF		
Projected power-on hours	300,000	
Power		
Requirements	+ 5 VDC + or - 5%	
Dissipation (typical)		
Start Up (Maximum Peak)	4.7 Watts	
Seek	2.0 Watts	
Read/Write	2.8 Watts	
Idle	1.35 Watts	
Shutdown	0.4 Watts	
Physical Size		
Height	17 mm	
Width	70 mm	
Depth	100 mm	
Weight	173/180/180 g	
	Operating	Non-Operating
Environmental Characteristics		
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-sine-wave	10 G/11 msec	250 G/2 msec
Vibration		
Random (RMS)	0.67 G (5-500 Hz)	1.04 G (2-200 Hz)

(1) 1 MB=1,000,000 Bytes

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