

Apple 230MB Hard Drive: Specifications (3/93)

Article Created: 17 March 1993 * RESTRICTED: Apple Internal and Support Providers Only * Not For General Public Release TOPIC ------What are the technical specifications of the internal 230MB hard disk for the Macintosh. DISCUSSION -----The specifications for the 230MB Hard Drive are as follows: Capacity _____ Formatted Data Capacity: 245 MB Data Surfaces: 2 Heads: 4 Block Size: 512 bytes Performance _____ Average Seek Time: 16 ms NOC (Nominal Operating Conditions) 19 ms WOC (Worst Operating Consitions) Data Transfer Rate: Up to 5.0 MB/sec (Asynchronous) 16 sec WOC Startup: Must operate equally well in any orientation Physical _____ 3.5 inch Form Factor: Dimensions: 146.1 x 101.6 x 25.4 mm 50 Pin SCSI Connector Environmental _____

Temperature - Operating - Non-operating	5 degrees C to 55 degrees C -40 degrees C to 70 degrees C
Relative Humidity:	8 to 80%, operating, non-condensing 5 to 95%, non-operating
Altitude - Operating - Non-operating	-200 feet to 10,000 ft -200 feet to 15,000 ft
Vibration peak level: - Operating	: 1.0 g with no errors
- Non-operating	2.0 g with no damage allowed
Shock levels - Operating - Non-operating	6 g with no errors 70 g
Power Requirements	
Voltage	5V DC with tolerance of +/-5% 12V DC with tolerance of +10%/-5&
Power Draw:	
- Startup	12.3 watts (avg.)
- Idle	3.9 watts (avg.) Drive is not reading, writing, seeking, or executing commands. A portion of the R/W circuitry is powered down.
- Access	4.9 watts (avg.) This is when data is being written to or read from the drive. The head is assumed to be on track.
- Peak Current	<.31 amps on 5V, 1.0 amps on 12V
Termination power is provided through pin 26 of the 50 pin SCSI connector.	
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