




DiamondMax® 80

 Maximize your computer's data storage capacity and performance with Maxtor DiamondMax® 80 hard drives. These high-capacity drives, available in formatted capacities up to 81.9 GB, are designed for high-end desktops and workstations. They're ideally suited to storage-hungry multimedia and Internet applications where high burst and sustained transfer rates are crucial. Their Ultra ATA/100 interface, 2 MB SDRAM cache buffer and a 9 ms average seek time provide data transfer speeds up to 100 megabytes per second. They employ Maxtor's Adaptive ATA Control™ for unsurpassed data integrity and Maxtor's Silent Store™ technology for whisper-quiet acoustic performance. Whether your application is technical, multimedia or Internet-based, the DiamondMax 80 delivers an unbeatable combination of capacity, speed and reliability.

5400 RPM

**3.5-INCH
HIGH-
PERFORMANCE
HARD DRIVES**

Capacities up to 81.9 GB

*Designed for High-end
Desktops and Workstations*

HIGHLIGHTS:

*Fast ATA/Enhanced
IDE compatible*

*Digital Signal Processor
(DSP)-Based Architecture*

*Ultra ATA/100
Data Transfer Rate*

*2 MB SDRAM
Cache Buffer*

9 ms Seek Time

*No Quibble Service®
and Support*



Best Buy
DiamondMax Plus 40 (40 GB)
Computer Shopper, April 2000



Kick Ass Product
DiamondMax Plus 40 (40 GB)
Maximum PC, April 2000



Best Hard Drive
DiamondMax 60 (60 GB)
PC World, June 2000



Win100 Award 2000
DiamondMax Plus 40 (40 GB)
Winmag.com, June 2000

DiamondMax[®] 80

Maxtor's DiamondMax 80 series delivers outstanding performance including:

- 20.5 GB of data storage per platter
- Fast data transfer rates (up to 100 MB/sec)
- 5400 RPM spin speed
- 9 ms average seek
- 2 MB cache buffer
- 3-year warranty



MODEL	98196H8	96147H6
CAPACITY	81964 MB	61473 MB
HEADS	8	6
PLATTERS	4	3

PERFORMANCE SPECIFICATIONS

Seek Times (typical)	
Track to Track	1 ms
Average	9 ms
Full Stroke	< 20 ms
Average Latency	5.55 ms
Rotation Speed (± 0.1%)	5400 RPM
Controller Overhead	< 0.3 ms
Start Time (0 - drive ready)	10 sec typical

DATA TRANSFER RATES

To/From Interface	up to 100 MB/sec
To/From Media	up to 46.7 MB/sec

DRIVE CONFIGURATION

Integrated Controller	Ultra ATA/100
Buffer Size	2 MB
Buffer Type	SDRAM
Data Zones per Surface	16
Bytes per Sector/Block	512

RELIABILITY SPECIFICATIONS

Start/Stop Cycles	50,000 (minimum)
Component Design Life	5 years (minimum)
Data Errors (non-recoverable)	< 1 per 10E14 bits read
Annual Return Rate (ARR)	< 1%

POWER REQUIREMENTS (TYPICAL)

MODE	12V±10%	5V±5%	POWER
Spin-up (peak)	2000 mA	490 mA	
Seek	650 mA	550 mA	10.6 W
Read/Write	250 mA	550 mA	5.8 W
Idle	250 mA	500 mA	5.5 W
Standby	30 mA	280 mA	1.6 W

ENVIRONMENTAL LIMITS

ACOUSTICS

Idle mode	3.3 bel (average sound power) ¹
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TEMPERATURE

Operating	5° C to 55° C
Non-operating, Storage	-40° C to 71° C

RELATIVE HUMIDITY (NON-CONDENSING)

Operating, Non-operating, Storage	5% to 95%
Maximum Wet Bulb, Operating	30° C

VIBRATION

Operating, random, no errors ²	10 to 45 Hz at 0.004 G ₂ /Hz
	48 to 62 Hz at 0.008 G ₂ /Hz
	65 to 300 Hz at 0.004 G ₂ /Hz
Non-operating, random	301 to 500 Hz at 0.0006 G ₂ /Hz
	10 to 2,000 Hz at 2.15 Grms, no damage
Operating, swept sine (.25 octave per minute)	10 to 300 Hz
	1.0 G peak amplitude

SHOCK

Operating Mechanical Shock	30 Gs, 2 ms, no errors ²
Non-operating Mechanical Shock	250 Gs, 2 ms, no damage ²

PHYSICAL DIMENSIONS (MAXIMUM)

Height	1.02 in	2.61 cm
Length	5.78 in	14.70 cm
Width	4.00 in	10.16 cm
Weight	1.33 lbs	0.601 kg



All Maxtor products are backed by the *No Quibble Service*[®] policy, the benchmark for service and support in the industry. *No Quibble* includes:

- **Advance replacement in 2 business days**
- **MaxFax[®] 24-hour automated technical support**
- **Maxtor's commitment to total customer satisfaction**
- **Phone technicians available Monday–Friday**

For more information or to talk to a customer support representative, call: (U.S. and Canada) 800-2MAXTOR. Available 5 A.M. – 5 P.M. (PT) Mon–Fri; (Europe) +353 1 204 1111. Available 9:30 A.M.–6 P.M. (CET) Mon–Thurs and 9:30 A.M.–5 P.M. (CET) Fri; (Asia/Pacific) 800-481-6788. Available 8 A.M.–5:30 P.M. (GMT+8) Mon–Fri; or visit our home page on the Internet at <http://www.maxtor.com>.

Specifications subject to change without notice. Maxtor defines 1 megabyte as 10⁶ or 1 million bytes and 1 gigabyte as 10⁹ or 1 billion bytes. ¹Acoustics measured at sea level. ²Without non-recoverable errors. Adaptive ATA Control[™], DualWave[™], MaxSafe[™], Silent Store[™] and ShockBlock[™] are trademarks of Maxtor. DiamondMax[®], Maxtor[®], MaxFax[®] and No Quibble Service[®] are registered trademarks of Maxtor Corporation. Copyright © 2000 Maxtor Corporation. Printed in the U.S.A. 9/00 Stock #DM80/4825 Rev. B

