



## **DiamondMax<sup>®</sup> VL 30**

 Our latest 5,400 RPM DiamondMax<sup>™</sup> VL 30 series deliver unbeatable value for the emerging entry-level system and consumer electronics markets. Based on 1- and 2-disk configurations, the VL series offers reliable storage in a cost effective package. Available in capacities up to 30 GB, the VL series provides the field-proven quality and reliability of our mainstream DiamondMax products and includes Maxtor's innovative ShockBlock<sup>™</sup> and MaxSafe<sup>™</sup> feature sets for added reliability and superior protection from shock damage. An UltraDMA 66 interface, 512 KB cache buffer and <9.5 ms seek performance come standard with each VL product. When your application requires a cost effective storage device, choose the leader of innovative storage products—specify the DiamondMax VL series by Maxtor.

### **5,400 RPM**

#### **3.5-INCH VALUE SERIES HARD DRIVES**

Capacities up to 30 GB

Designed for Entry-level  
Systems and Consumer  
Electronics Applications

#### **FEATURES:**

Fast ATA/Enhanced  
IDE compatible

Digital Signal Processor  
(DSP)-Based Architecture

UltraDMA 66  
Data Transfer Rate

512 KB SDRAM  
Cache Buffer

<9.5 ms Seek Time

No Quibble Service<sup>®</sup>  
and Support

**WinLIST**  
Winmag.com 2000

Category Leader  
DiamondMax Plus 40 (40.9 GB)  
Winmag.com, January 2000



Safe Buy  
DiamondMax Plus 40 (40.9 GB)  
Storage Review.com, December 1999



Hard Drive Best Buy  
DiamondMax Plus 5120 (20.4 GB)  
PC World Magazine, October 1999

**WinLIST**  
Winmag.com 2000

Category Leader  
DiamondMax Plus 6800 (27.3 GB)  
Winmag.com, October 1999

MODEL	33073U4	32049U3	31536U2	30768U1
CAPACITY	30,735 MB	20,490 MB	15,367 MB	7,683 MB
HEADS	4	3	2	1
DISKS	2	2	1	1

**DiamondMax<sup>®</sup> 30**  
VL

The DiamondMax VL 30 series delivers unbeatable reliability including:

- 15.3 GB of storage per disk
- Fast data transfer rates (up to 66 MB/sec)
- 5,400 RPM spin speed
- < 9.5 ms average seek
- 512 KB cache buffer
- 3-year warranty



**PERFORMANCE SPECIFICATIONS**

Seek Times (typical)	
Track to Track	1 ms
Average	< 9.5 ms
Full Stroke	< 20 ms
Average Latency	5.55 ms
Rotation Speed (± 0.1%)	5,400 RPM
Controller Overhead	< 0.3 ms
Start Time (0 - drive ready)	8.5 sec typical

**DATA TRANSFER RATES**

To/From Interface	up to 66 MB/sec
To/From Media	up to 40.8 MB/sec

**DRIVE CONFIGURATION**

Integrated Controller	ATA-5/UDMA 66
Buffer Size	512 KB
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 10 <sup>14</sup> bits read
Annual Return Rate (ARR)	< 1%

**POWER REQUIREMENTS (TYPICAL)**

MODE	12V±10%	5V±5%	POWER
Spin-up (peak)	1800 mA	600 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	20 mA	200 mA	1.3 W

**ENVIRONMENTAL LIMITS**

**ACOUSTICS**

Idle mode	3.1 bel (average sound power) <sup>1</sup>
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**TEMPERATURE**

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

**RELATIVE HUMIDITY (NON-CONDENSING)**

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

**ALTITUDE (RELATIVE TO SEA LEVEL)**

Operating	-200 - 10,000 feet
Non-operating	-200 - 40,000 feet

**VIBRATION**

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

**SHOCK**

Operating Mechanical Shock	30 Gs, 2 ms, no errors <sup>2</sup>
Non-operating Mechanical Shock	250 Gs, 2 ms, no damage <sup>2</sup>

**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	1.30 lbs	0.59 kg



**ShockBlock**

**MaxSafe**



All Maxtor products are backed by the *No Quibble Service*<sup>®</sup> policy, the benchmark for service and support in the industry. *No Quibble Service* 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 10<sup>6</sup> or 1 million bytes and 1 gigabyte as 10<sup>9</sup> or 1 billion bytes. <sup>1</sup>Acoustics measured at 5k ft. <sup>2</sup>Without non-recoverable errors. DualWave™, MaxFax™, MaxSafe™ and ShockBlock™ are trademarks of Maxtor. DiamondMax™, Maxtor™ and No Quibble Service™ are registered trademarks of Maxtor Corporation. Copyright © 2000 Maxtor Corporation. Printed in the U.S.A. 3100 Stock #VL30 Rev. 4710A

