



DiamondMax® 17

ATA HARD DRIVE 80GB | 160GB | 250GB | 320GB

HIGHLIGHTS

- 3.5-inch 7200 RPM 3.0Gb Serial ATA hard drive
- Mainstream capacities up to 320GB
- Reliability, features and performance for Desktop PC computing

FEATURES

- Leading technology supports popular capacity points
- Latest Serial ATA interface with 3.0 Gb/s data transfer speed
- Native Command Queuing
- Ultra ATA data transfer speeds up to 133MB/s
- Engineered for robustness and reliability
- · RoHS compliant

DESIGNED FOR

- · Home desktop PCs
- · Office and business PCs
- · Dual drive PC applications
- General, non-PC, ATA hard drive storage applications

Reliability, performance and leading mainstream features

DiamondMax 17 is the latest ATA disk drive from Maxtor and has been designed to provide reliability and value for home or office desktop PC users.

Capacities

The drive offers the most efficient support of desktop capacity points 80GB to 320GB.

Low Power and Quiet

The DiamondMax 17 disk drive design combines performance with low power and acoustics.

Delivering reliability

The robust design of the DiamondMax 17 drive has been engineered to deliver reliability and data integrity.

The Maxtor-developed Shock Protection System™ and Data Protection System™ provide enhanced protection against operating and non-operating shock.

Serial ATA

DiamondMax 17 disk drive incorporates the latest features of the Serial ATA interface (SATA II) with 3.0Gb data transfer rates and functions to accelerate system performance.

Available SATA II features include Native Command Queuing² which intelligently reorders read and write commands to optimize drive efficiency and performance.

Parallel ATA

Also available with the Maxtor-developed Ultra ATA/133 interface.

RoHS Compliant

Maxtor supports the EU directive for Restriction of Hazardous Substances (RoHS)³. DiamondMax 17 is RoHS compliant.

¹ Drive base casting temperature

Native Command Queuing is not available on drives with a parallel ATA interface
Directive 2002/95/EC of the European Parliament and of the Council of 27 January, 2003

ORDER INFORMATION

Capacity	80GB	160GB	250GB	320GB
All products are RoHS Compliant				
Model Serial ATA (3.0Gb/s) 8MB buffer	6G080E0	6G160E0	6G250E0	6G320E0
Model ATA /133 2MB buffer	6G080L0	_	_	_
Model ATA/133 8MB buffer	_	6G160P0	6G250P0	6G320P0

SPECIFICATIONS

Performance Specifications	
Rotational Speed	7200 RPM
Buffer Size	
80GB to 320GB SATA	8MB
80GB ATA/133	2MB
160GB to 320GB ATA/133	8MB
External Data Transfer Rate (max)	
Serial ATA (Gb/s)	1.5 or 3.0
Parallel ATA (MB/s)	133
Typical Seek time 80GB (ms)	12
Typical Seek time 160-320GB (ms)	8.9
Average latency (ms)	4.17
SATA II Features	

SATA versions of DiamondMax 17 have most of the extensions to the SATA II specification including **Native Command Queuing**

Reliability Specifications

Ramp Load/Unload cycles	600k
Component Design Life (min)	5 years
Annualized Return Rate (ARR)	<1%

Acoustics				
Idle—typical (Bels)		2.6		
Quiet Seek—typical (Bels)		2.7		
Normal Seek—typical (Bels)		3.2		
Environmental Limits				
Temperature				
Operating (°C)		0 to 60		
Non-operating (°C)		-40 to 70		
Shock				
Operating Mechanical Shock 2ms (G) 65				
Non-operating Mechanical Shock 2ms (G) 350				
Physical Dimensions	1 disk	2 disk		
Width (max mm)	102	102		
Length (max mm)	147	147		
Height (max mm)	26.1	26.1		
Weight—normal	460g/1.02lb	530g/1.12lb		
Power Consumption				
Start up mode (typical peak W)		<25		









For support or information, call us at 1-800-2Maxtor or visit us at www.maxtor.com

All Maxtor products are backed by our leading service and support staff.

To speak with a Maxtor product support representative in the U.S. and Canada, call 1-800-2MAXTOR, Mon.-Fri. from 7 a.m. to 4 p.m. (PST).

In Europe, call +353 1 204 1111 Mon.-Thur. from 8:30 a.m. to 5 p.m. (GMT) and Fri. 8:30 a.m. to 4 p.m. (GMT).

In Australia, call +61 2 9369 3662. In Japan, call 005316-53616, and in Singapore, call 65-6852-0220 or 1-800-481-6788.

Sequential Read/Write (typical W)

Idle Mode (typical W)

Standby Mode (typical W)

For purposes of measuring drive storage capacity, a gigabyte (GB) means 1,000,000,000 bytes.

Total accessible capacity varies depending on operating environment. Seek times are at nominal conditions and include settling. Specifications subject to change without notice. Seek performance developed utilizing technology licensed from Convolve, Inc.



<10

<8

<1