

MIDLINE AND NEARLINE

3.5" ATA DRIVES FOR 24X7 POWER-ON APPLICATIONS

HIGHLIGHTS

- Large capacity up to 300GB
- 7200 RPM
- SATA and PATA interfaces
- 16MB cache buffer
- SATA II features
- Native command queuing for 2X improved random read performance over previous generation MaXLine
- 12.5 rad/sec² rotational vibration

EXCEPTIONAL RELIABILITY

- Three-year warranty
- Rated to 1 million hours MTTF* for midline and nearline applications at low I/O duty cycles
- S.M.A.R.T. features

MaXLine™ III

SATA/PATA HARD DRIVE

250GB 300GB

Native SATA With SATA II Features, Large Capacity and Reliability for Midline and Nearline Applications

MaXLine III drives provide large-capacity enterprise disk storage ideally suited for midline and nearline applications that require increased performance beyond traditional optical and tape solutions, as well as higher reliability than traditional desktop hard drives. MaXLine III drives provide IT managers with faster, more efficient alternatives to traditional backups, such as point-in-time copies, snapshot clones and remote replication. Businesses also have the option of maintaining more information on midline storage to supplement their online storage, offering them greater flexibility in managing their data. The third-generation MaXLine drives offer up to 300GB storage capacity designed for Mean Time To Failure (MTTF) of 1 million hours* for low I/O duty cycle midline and nearline applications. Offered with a three-year limited warranty, MaXLine III drives are available in either parallel or serial ATA interfaces.

Maxtor MaxCommand™ technology

- Native command queuing
- Adaptive cache algorithms
- Support for increased cache size—16MB
- Read streaming performance

SATA II features

- Native command queuing
- Hot plug
- Staggered spin-up
- Asynchronous recovery

Reliability

- 1 million hours MTTF* at low duty cycle
- S.M.A.R.T. features

Best-fit enterprise applications

- Reference storage applications
- Email archive
- Data warehousing
- Point-in-time copy
- Snapshot clones
- Remote replication
- Disk-to-disk-to-tape
- Video security applications
- Entry-level RAID applications
- Entry-level NAS environments
- High-end workstations



ORDER INFORMATION

Capacity	250GB	300GB
Model ATA/133 16MB buffer	7B250R0	7B300R0
SATA/150 16MB buffer	7B250S0	7B300S0

SPECIFICATIONS

	250GB	300GB		250GB	300GB
Formatted Capacity (GB)	250	300	Operating		
Bytes per Sector	512		Temperature (°C)	5–55	
Interface	Parallel ATA/133		Non-Condensing Humidity (%)	5 to 95	
	SATA 150		Shock 2 msec (Linear half sine G) read & write	60	
Disk Drive Configurations			Rotational Shock (rad/sec ² , 2ms)	2000	
Disks	3		Random Vibration 10–800 Hz (G)	0.86	
Heads	6		Rotational Vibration 10–800 Hz (rad/sec ²)	12.5	
Bytes per Sector/Block	512		Altitude (ft)	-650 to 10,000	
Performance Specifications			Acoustics, Idle (bels)	2.7	
Spindle Speed (RPM)	7200		Non-Operating		
Seek Time:			Temperature (°C)	-40 to 71	
Average Read (ms)	9.3		Non-Condensing Humidity (%)	5 to 95	
Track-to-Track Read/Write (ms)	0.8		Shock 2 msec (Linear half sign G)	300	
Average Rotational Latency (ms)	4.17		Vibration 7–800 Hz (G)	3	
Full Stroke (ms)	<17		Altitude (ft)	-650 to 40,000	
Transfer Rate:			Power Specifications		
Parallel ATA Maximum Burst Transfer Rate (MB/s)	133		Voltage Requirements	5V+/-5% 12V+/-10%	
Serial ATA (MB/s)	150		Idle Mode (W)	7.6	
Buffer (Cache) Size (MB)	16		Physical Dimensions		
Reliability Specifications			Width max (mm)	101	
MTTF (Mean Time To Failure) at low duty cycle	1,000,000		Length max (mm)	147	
Contact Start Stop (CSS) Cycles	50,000		Height max (mm)	25	
Data Error Rate per Bits Read			Weight typical (grams)	630	
Recoverable	<10 per 10 ¹²				
Nonrecoverable	<1 per 10 ¹⁵				
Limited Warranty (years)	3				



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.

Service includes:

- Advance replacement in two business days
- 24-hour on-line troubleshooting tools and email
- Telephone support representatives available Monday-Friday during business hours (except holidays)

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.

For purposes of measuring drive capacity, a megabyte (MB) means 1,000,000 bytes, 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.
* MTTF refers to the estimated mean time to failure based upon a statistical sample.

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