



Atlas™ 10K III 18.4 GB, 36.7 GB, 73.4 GB

Exceptional performance and value for servers, workstations, and storage subsystems

THE MARKET

Explosive growth in enterprise-wide computing and Internet applications is creating increased demand for larger and faster servers, performance workstations, and storage subsystems. To address this growth, Maxtor offers the award-winning Atlas™ 3.5-inch Product Family. The latest offering is the Atlas 10K III hard disk drive, which extends Maxtor's leadership position in the market. Atlas 10K III offers its customers the necessary capacity, leading performance, and rock-solid reliability to generate significant competitive advantages.

PERFORMANCE AND MORE...

The Atlas 10K III drive continues Maxtor's performance leadership position. It sports a 10,000 RPM platter rotational speed, blazing-fast 4.5 millisecond (ms) seek time, a large 8 megabyte (MB) cache buffer, and a 55 megabyte-per-second (MB/sec) peak sustained data throughput. These specs lead to one conclusion — the Atlas 10K III drive delivers the leading random I/O performance and sequential throughput required by our customer's data-intensive applications.

Per-platter data densities directly influence customer value and drive reliability. The Atlas 10K III boasts the highest per-platter data density of 18.4 gigabytes (GB) per platter. This allows us to pack 18.4 GB, 36.7 GB and 73.4 GB offerings in a 1-inch form factor. The combination of performance and value makes the Atlas 10K III the optimum choice for Windows NT and UNIX enterprise and departmental servers, high-performance workstations, and storage subsystems.

MAXTOR QUALITY AND RELIABILITY

To ensure flawless and consistent performance, the Atlas 10K III drive features Maxtor's breakthrough Shock Protection System III (SPS III). SPS III protects the drive from mistreatment during handling and integration. For systems integrators, SPS III results in fewer returns, lower total cost of ownership, and more satisfied customers. SPS III is but an example of Maxtor's continuous commitment to quality — we confidently stand behind the Atlas 10K III with a five-year warranty.

KEY FEATURES AND BENEFITS

Exceptional Performance – 10,000 RPM, 4.5ms seek time, large 8 MB cache buffer, and peak 55 MB/sec sustained data throughput.

Exceptional Value – 18.4 GB/platter leads the way for the next generation of SCSI drives. Higher data densities allow for higher reliability and customer value.

Advanced interfaces – U160 and U320 interfaces available. U320 includes new features such as Packetization and Quick Arbitrate & Select, which greatly increase data throughput performance. The U320 interface keeps Maxtor in the lead in providing the latest interface technology.

Superior Reliability – Maxtor Shock Protection System, Data Protection System, Thermal and Shock Sensors, S.M.A.R.T. Compliance.

Superior Manageability – Active LVD bus hot pluggable design, intelligent bus management, and automatic SCSI mode configuration for U320, U160, Ultra2, Ultra, and Fast SCSI interfaces.

Improved Acoustics – Acoustics are very important for many customers. To address their needs, we designed the acoustic levels of a 7,200 rpm drive into a 10,000 rpm drive! Yet another example of Maxtor setting a new standard.



SPECIFICATIONS				18.4	36.7	73.4
Form Factor		3.5"	3.5"	3.5"		
Interface	U320 and U160. Backwards compatible to Ultra2, Ultra SCSI. In 68-pin wide and 80-pin SCA-2					
Formatted Capacity (MB ¹)		18,400	36,700	73,400		
Disk Drive Configuration						
Disks		1	2	4		
Head/Recording Surfaces		2	4	8		
Bytes per Sector	512					
Maximum Areal Density (Gb/sq. in.)	17.9					
Encoding/Detection Method	50/52 RLL PRML					
Performance Specifications						
Typical Seek Times ² (ms)						
Average	4.5					
Track-to-Track	0.3					
Full Stroke	11					
Average Rotational Latency (ms)	3.0					
Rotational Speed (RPM)	10,000					
Internal Data Rate (Mb/sec)	350 to 622					
Sustained Throughput (MB/sec)	33 to 55					
Data Transfer Rates (Buffer Host)						
Ultra320 SCSI (MB/sec)	320					
Ultra160 SCSI (MB/sec)	160					
Ultra2 SCSI (MB/sec)	80					
Ultra SCSI (MB/sec)	40					
Buffer Size (MB)	8					
Reliability Specifications						
Data Errors (per bits read)						
Recoverable	<10 per 10 ¹²					
Nonrecoverable	<10 per 10 ¹⁶					
Error-Correction Method	360-bit non-interleaved Reed Solomon ECC with on-chip correction					
Warranty ³ (years)	5					
Physical Specifications						
Dimensions—inches (mm)						
Width	4.00 (101.6)					
Length	5.787 (147.0)					
Height	1.028 (26.1)					
Weight—pounds (kg)	max - 1.54 (0.7)					
Environmental Limits						
Operating						
Temperature (°C)	5 to 55					
Non-Condensing Humidity (%)	5 to 95					
Vibration (G, 5 to 500 Hz)	0.5					
Acoustics (bels, Idle) - typical		3.1	3.4	3.6		
Non-Operating						
Temperature (°C)	-40 to 70					
Non-Condensing Humidity (%)	5 to 95					
Shock (G, 2 ms, 1/2 sine)	250					
Vibration (G, 5 to 500 Hz)	2.0					
Power Specifications						
Voltage Requirements (V)	+5V DC±5% +12V DC ±5%					
Typical Power Draw (W, Idle)						
SCSI	10					
Peak Current (A on +5V/+12V)						
Start-up	0.9/2.2					

1. Maxtor defines a megabyte (MB) as 10⁶ or 1,000,000 bytes. 2. Seek times are at nominal conditions and include settling. 3. This warranty is standard when products are purchased directly through authorized Maxtor distributors/dealers. End-user warranties provided by computer manufacturers may vary.



Atlas 10K III

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* +61 2 9369 3662. Available 8 a.m. - 5:30 p.m. (GMT+8) Mon-Fri or visit our home page on the Internet at www.maxtor.com

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