

5,400 RPM
MQ01ABF / MQ01ABU
Series Hard Disk Drive

TOSHIBA
Leading Innovation >>>

*High Capacity in a Thin,
Lightweight Design*



MQ01ABF050
MQ01ABF032
MQ01ABU032W
MQ01ABU050W

The Toshiba MQ01ABF/ MQ01ABU condenses high-capacity storage in a thin and lightweight hard disk drive series that holds from 320GB to 500GB of digitized data in a 7-millimeter high package. At 92 grams, the MQ01ABF/ MQ01ABU is over 34% lighter than the leading cellular phone with a 24.7% slimmer profile.

In addition to its sleek dimensions the 5400 RPM MQ01ABF/ MQ01ABU drives also feature fast performance to speed data across a SATA 6Gbit-per-second interface while operating at whisper-quiet acoustics.

Designed for the rigors of mobility, the MQ01ABF/ MQ01ABU offers the same durability against shock and vibration as its 9.5-millimeter high MQ01ABD, 320GB to 1TB, series counterpart, making it ideal for slim-line laptop computers as well as space-constrained digital video recorders, all-in-one desktop PCs, printers and other computing applications.

- Sleek, 7-millimeter High Profile
- Up to 500GB of Storage Capacity
- 5400 RPM Rotational Speed
- Tough Against Shock and Vibration
- Security Models Available

Hard Drive

5,400 RPM

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Standard
Security
AE256, TCG-OPAL SSC, SANITIZE Cryptographic Erase
Toshiba wipe technology

MQ01ABF050
MQ01ABU050W

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Basic Specification

Drive Capacity	500GB*	320GB*
Drive Interface	Serial ATA 3.0 / ATA-8	
Number of Platters (Disks)	1	
Number of Data Heads	2	
RoHS Compliant	Yes	
Transfer Rate to Host	6 Gb/sec	
Number of User Data Cylinders	231,312	190,708
Bytes Per Sector (HOST)	512 byte	
Bytes Per Sector (DISK)	4096 byte	
Logical Blocks (LBA)	976,773,168	625,142,448
Maximum Areal Density	1153.4Mbit/mm ² (744.1 Gbits/in ²)	746.7 Mbit/mm ² (481.7 Gbits/in ²)

Performance

Track-to-track Seek	2ms
Max. seek time	22ms
Buffer Speed	8 MB
Rotation Speed	5,400 RPM
Average Latency Time	5.56ms

Reliability

Load/Unload	600,000
Error Rate Non-recoverable	1/10 ¹⁴ bit read

Power Requirements

Voltage	5V (+/- 5%)
Start	4.5 watts
Seek	1.85 watts
Read/Write Power	1.5 watts
Low Power Idle	0.55 watts
Standby Power	0.18 watts
Sleep Power	0.15 watts

Physical Size

Dimensions (W) x (D) x (H)	69.85 mm x 100 mm x 7.0 mm
Weight	92 g (Max.)

Environmental

Temp - Operating	5 to 55 °C
Temp - Non-Operating	-40 5 to 65 °C
Vibration (Operating)	9.8 m/s ² (1.0 G)
Vibration (Non-Operating)	49 m/s ² (5.0 G)
Shock (Operating)	3,920 m/s ² (400G) (2ms half sine)
Shock (Non-Operating)	8,820 m/s ² (900G) (1ms half sine)

Acoustics

Acoustics (idle)	19 dB
Acoustics (seek)	21 dB

Warranty

Limited Warranty	3 years (from date of purchase)
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*One Terabyte (1TB) = 1,000 Gigabytes (GB). One Gigabyte (1GB) means 10⁹ = 1,000,000,000 bytes using powers of 10. A computer operating system, however, reports storage capacity using powers of 2 for the definition of 1GB = 2³⁰ = 1,073,741,824 bytes, and therefore shows less storage capacity. Available storage capacity will also be less if the computer includes one or more pre-installed operating systems, pre-installed software applications, or media content. Actual formatted capacity may vary.

Subject to Change: While Toshiba has made every effort at the time of publication to ensure the accuracy of the information provided herein, product specifications, configurations, prices, system/component/options availability are all subject to change without notice. Product image may represent design model.

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