

5,400 RPM 2.5-Inch Mobile Hard Disk Drives

TOSHIBA
Leading Innovation >>>

*MK-55GSX Series offers
up to one half-terabyte in
capacity with quiet acoustics
and enhanced durability*



MK5055GSX
MK4055GSX
MK3255GSX
MK2555GSX
MK1655GSX
MK1255GSX

The MKxx55GSX Series of 5,400 RPM, 2.5-inch hard disk drives offers up to one-half terabyte in capacity with quiet acoustics and enhanced durability, providing a solid storage solution for mobile and stationary PCs, game consoles, printers, external storage devices as well as set top boxes, personal video recorders and surveillance systems. Toshiba's advanced servo techniques and mechanical design minimize drive acoustics, making them nearly inaudible during operation. The 320GB¹, 160GB¹ and 120GB¹ in particular, perform close to the threshold of human hearing.

Further design optimizations boost the durability of the MKxx55GSX line-up, providing industry-leading robustness against shock while the drives are in operation. An operational free-fall sensor (FFS) feature further protects the drive and user data against potential damage from shock, vibration and rough handling. The MKxx55GSX products support a 3 Gb/sec data transfer rate and have passed testing by the Serial ATA International Organization (SATA-IO) for SATA interoperability.

- Up to 500GB¹ of Storage Capacity
- 5,400 RPM Spin Speed
- 3 Gb/sec SATA
- Light-weight, Standard 9.5 mm-High Design
- Super-quiet Seek Technology
- Eco-Conscious and Low Power Design⁴

Hard Drive

5,400 RPM

2.5-Inch Mobile Hard Disk Drives

TOSHIBA
Leading Innovation >>>

Series Overview

	MK1255GSX	MK1655GSX	MK2555GSX	MK3255GSX	MK4055GSX	MK5055GSX
Drive Capacity	120GB ¹	160GB ¹	250GB ¹	320GB ¹	400GB ¹	500GB ¹
Drive Interface	Serial ATA Revision 2.6 / ATA-8					
Number of Platters (disks)	1	1	1	2	2	2
Number of Data Heads	1	2	2	4	4	4
Transfer Rate to Host	3 Gb/sec					

Performance

Track-to-track Seek	2ms					
Average Seek Time	12ms					
Rotational Speed	5,400 RPM					
Average Latency	5.55ms					
Buffer Size	8MB ²					

Power Requirements

Voltage	5V (+/-5%)					
Spin up (start) Power	4.5 watts					
Seek Power	1.7 watts					
Read/Write Power	1.4 watts					
Active Idle Power	0.85 watts ³					
Low Power Idle	0.6 watts ³					
Standby Power	0.18 watts ³					
Sleep Power	0.13 watts ³					

Physical Size

Dimensions (W) x (H) x (D)	69.85 mm (2.75") x 100 mm (3.94") x 9.5 mm (0.37")					
Weight	98 g (3.46 oz.)					

Environmental

Temp - Operating	5° to 55°C (41° to 131°F)					
Temp - Non-Operating	-40° to 60°C (-40° to 140°F)					
Vibration - Operating	9.8 m/s ² (1.0G) 5 to 500 Hz					
Vibration - Non-Operating	49 m/s ² (5.0G) 5 to 500 Hz	49 m/s ² (5.0G) 15 to 500 Hz	49 m/s ² (5.0G) 15 to 500 Hz	49 m/s ² (5.0G) 15 to 500 Hz	49 m/s ² (5.0G) 15 to 500 Hz	49 m/s ² (5.0G) 15 to 500 Hz
Shock - Operating	3,920 m/s ² (400G) 2ms					
Shock - Non-Operating	8,820 m/s ² (900G) 1ms					
Altitude - Operating	-300 to 3,000 m					

Acoustics

Acoustics (idle)	1.9 bels	1.9 bels	1.9 bels	2.5 bels	2.5 bels	2.5 bels
Acoustics (seek)	2.0 bels	2.0 bels	2.0 bels	2.5 bels	2.5 bels	2.5 bels

Limited Warranty

Limited Warranty	3 years (from date of purchase)
------------------	---------------------------------

Visit us at: www.toshibastorage.com

¹One Gigabyte (1 GB) 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 1 GB = 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.

²A small portion of buffer memory is used for drive firmware control.

³SATA PHY in slumber mode.

⁴Halogen free as defined by levels of chlorine (CL) and bromine (Br) or a compound in which they are combined reduced to be less than the standards of IEC61249-2-21:2003, as stated below: Chlorine: less than 900ppm, Bromine: less than 900ppm, Chlorine + bromine: less than 1500ppm

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.
© 2009 Toshiba America Information Systems, Inc. All rights reserved.