

7,200 RPM 2.5-Inch SATA Hard Disk Drives

TOSHIBA
Leading Innovation >>>

*High Performance and Lower
Power Consumption Across Broad
Line of Capacity Points*



MK1661GSYN
MK2561GSYN
MK3261GSYN
MK5061GSYN
MK6461GSYN

Designed for optimal performance and high durability, the Toshiba MKxx61GSYN series of 7,200 RPM hard disk drives deliver 160 to 640GB¹ of storage capacity in the 2.5-inch form factor. The MKxx61GSYN family of Serial ATA drives offers extreme power efficiency and superior operating acoustics over 3.5-inch drives for today's high-end notebook PCs, gaming laptops, and mobile workstations as well as Energy Star[®] all-in-one and slimline desktop PCs.

Toshiba couples greater power efficiency of the MKxx61GSYN drives with other environmentally-conscious solutions including RoHS-compliance and utilization of components that reduce PVC (polyvinyl chloride) and BFRs (brominated flame retardants) as well as meet halogen-free² standards.

An optional free-fall sensor responds to drop events and securely locks the recording heads in place off the media before system impact. This provides an additional level of ruggedness and durability to the MKxx61GSYN drives and is particularly suitable for mobile applications.

- Up to 640GB¹ of Storage Capacity
- Optimal Performance at 7,200 RPM
- Serial ATA 3.0 Gb/sec, Revision 2.6 / ATA-8
- 16MB Cache Buffer
- Optional Free-fall Sensor

Hard Drive

7,200 RPM

2.5-Inch SATA Hard Disk Drives



Series Overview

	MK1661GSYN	MK2561GSYN	MK3261GSYN	MK5061GSYN	MK6461GSYN
Drive Capacity	160GB ¹	250GB ¹	320GB ¹	500GB ¹	640GB ¹
Drive Interface	Serial ATA 3.0 Gb/sec, Revision 2.6 (ATA-8)				
Number of Platters (disks)	1	1	1	2	2
Number of Data Heads	1	2	2	4	4
RoHS Compliant	Yes				
Transfer Rate to Host	3 Gb/sec				

Performance

Track-to-track Seek	1ms
Average Seek Time	12 ms
Rotational Speed	7,200 RPM
Average Latency	4.16ms
Buffer Size	16MB

Power Requirements

Voltage	5V (+/-5%)
Spin up (start) Power	5.5 watts
Seek Power	2.3 watts
Read/Write Power	2.1 watts
Low Power Idle	0.8 watts
Standby Power	0.16 watts
Sleep Power	0.13 watts

Physical Size

Dimensions (W) x (D) x (H)	69.85 mm (2.75") x 100 mm (3.94") x 9.5 mm (0.37")				
Weight	98 g (3.46 oz)	98 g (3.46 oz)	98 g (3.46 oz)	115 g (4.06 oz)	115 g (4.06 oz)

Environmental

Temp - Operating	5° to 55°C (41° to 131°F)
Temp - Non-Operating	-40° to 65°C (-40° to 149°F)
Vibration - Operating	9.8 m/s ² (1.0G) 5 to 500 Hz
Vibration - Non-Operating	49 m/s ² (5.0G) 15 to 500 Hz
Shock - Operating	3,185 m/s ² (325G) 2ms
Shock - Non-Operating	8,820 m/s ² (900G) 1ms

Acoustics

Acoustics (idle)	23 dB	23 dB	23 dB	26 dB	26 dB
Acoustics (seek)	23 dB	23 dB	23 dB	26 dB	26 dB

Limited Warranty

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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.

²Products are considered "Halogen-free" when each homogeneous material in the product consists of a maximum bromine or chlorine concentration of 900 parts per million for weight percentage. Group VIIA halogens, fluorine, iodine and astatine, are not restricted in the industry-standard, ENV0199 description. Toshiba also restricts concentrations of red phosphorus and antimony trioxide in its Halogen-free HDD products.

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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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