

4,200 RPM

2.5-Inch SATA Automotive-Grade Hard Disk Drive

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Innovative commercial automotive-grade HDD technology



MK1060GSC
MK2060GSC

Toshiba's MKxx60GSC series Serial ATA hard disk drives target today's increasing capacity needs of in-vehicle and industrial applications with a 4,200 RPM spin speed, up to 200GB¹ of storage capacity, and a standard 2.5-inch form factor. The MKxx60GSC drives offer the highest capacity point available for the ruggedized, automotive-ready disk drive segment and provides premium vehicle systems manufacturers with the high-capacity storage needed to improve telematics, navigation, and entertainment systems.

Fuelled by consumers' desire for multimedia applications and navigation systems physically integrated into their cars, the MKxx60GSC series drives represent a significant innovation in commercial automotive-grade hard disk drive technology. Technical benefits include improvement in internal transfer rates over prior generation models, a faster seek time of 12-milliseconds, and an extremely quiet 'silent seek' operation of 23dB. All Toshiba automotive-grade hard disk drive models are suitable for use in industrial applications where an extended temperature tolerance of -30° to 85°C is required.

- Up to 200GB¹ of Storage Capacity
- 9.5-millimeter High Profile
- Serial ATA, Revision 2.6 / ATA-8
- 8MB Cache Buffer
- Extended Temperature Operating Range (-30 to 85 C)
- Extended Altitude Operating Range (-300 to 5,500 meters)

Hard Drive

4,200 RPM

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Series Overview

MK1060GSC

MK2060GSC

Drive Capacity	100GB ¹	200GB ¹
Drive Interface	Serial ATA, Revision 2.6 / ATA-8	
Number of Platters (disks)	1	
Number of Data Heads	2	
RoHS Compliant	Yes	
Transfer Rate to Host	1.5 Gb/sec	

Performance

Track-to-track Seek	2 ms
Average Seek Time	12 ms
Rotational Speed	4,200 RPM
Average Latency	7.14 ms
Buffer Size	8MB

Power Requirements

Voltage	5V (+/- 5%)
Spin up (start) Power	5.5 watts (-20° to 85°C) / 7.0 watts (-30° to -20°C)
Seek Power	2.3 watts
Read/Write Power	2.0 watts
Active Idle Power	1.0 watts ²
Low Power Idle	0.8 watts ²
Standby Power	0.25 watts ²
Sleep Power	0.13 watts ²

Physical Size

Dimensions (W) x (D) x (H)	69.85 mm (2.75") x 100.0 mm (3.94") x 9.5 mm (0.37")
Weight	96 g (3.39 oz)

Environmental

Temp - Operating	-30° to 85°C (-22° to 185°F)
Temp - Non-Operating	-40° to 95°C (-40° to 203°F)
Vibration - Operating	29.4 m/s ² (3.0G) 5 to 50 Hz / 24.5 m/s ² (2.5G) 50 to 500 Hz
Vibration - Non-Operating	49 m/s ² (5.0G) 10 to 500 Hz
Shock - Operating	2,940 m/s ² (300G) 2.0ms 1/2 sine / 980 m/s ² (100G) 11ms 1/2 sine
Shock - Non-Operating	7,840 m/s ² (800G) 1ms 1/2 sine
Atmospheric Pressure ³ (Altitude) Operating	495hPa (5,650m) – 1,050hPa (-300m)
Atmospheric Pressure ³ (Altitude) Non-Operating	193hPa (12,000m) – 1,050hPa (-300m)

Acoustics

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

Limited Warranty

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1 year (from date of purchase)

¹One 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.

²S-ATA power management features applied.

³Transfer functions set by the International Civil Aviation Organization's (ICAO) standard for atmospheric pressure states that variations can occur depending on conditions, such as

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temperature and other factors. Based on Chronological Scientific Tables, variations can occur depending on conditions, such as temperature and other factors.

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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