SATA 120/80GB
1.8-Inch Hard Disk Drives

Market-Leading Capacity

High-Performance

Durability

MK1216GSG
MK8016GSG

Spurring further innovation in computing devices, the Toshiba MKxx16GSG series of hard disk drives combines the Serial ATA interface with a powerful, 5400 spindle speed in a compact, 1.8-inch package weighing only 62 grams. Offering storage capacities of 80GB[1] and 120GB[1] and a fast media transfer rate of 489 megabits per second, the MKxx16GSG series drives are designed for small, mobile computers including sub-notebooks, tablet PCs, ultra-portable systems and netbooks as well printers and other stationary applications.

Small size, light weight and rugged construction make the MKxx16GSG drives tough against external shock and vibration events while the low, 1.4 watt read and write power consumption prolongs battery life and keeps heat dissipation to a minimum.

- Up to 120GB[1] in the 1.8-inch Form Factor
- 5400 RPM Rotational Speed
- Serial ATA 1.5 Gbps with Micro-SATA Connector
- 8MB Cache Buffer
- Withstands up to 1,500G in Non-Operating Mode

Hard Drive

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TOSHIBA
Leading Innovation >>>

Specifications		MK1216GSG (HDD1F01)	MK8016GSG (HDD1F06)
Series Overview	Interface	SATA 1.5Gb/s Serial ATA 2.6	SATA 1.5Gb/s Serial ATA 2.6
	Capacity	160GB[1]	80GB[1]
	Number of Platters	2	2
	Number of Data Heads	4	4
	RoHS Compatible[2]	Y	Y
Performance	Max Transfer Rate to Host	1.5Gb/s	1.5Gb/s
	Media Transfer Rate (max)	489 Mbits/sec	489 Mbits/sec
	Rotational Speed	5400rpm	5400rpm
	Average Latency	5.55	5.55
	Buffer[3]	8MB	8MB
	Track-to-track Seek Time	3ms	3ms
	Average Seek Time	15ms	15ms
	Load/Unload Cycles	600,000	600,000
Power Requirements	Voltage	3.3V ± 5%	3.3V ± 5%
	Energy Consumption Efficiency[4]	0.0028W/GB	0.0056W/GB
	Spin-up	2.5watts	2.5watts
	Seeking	1.4watts	1.4watts
	Reading	1.4watts	1.4watts
	Writing	1.4watts	1.4watts
	Active Idle	0.55watts	0.55watts
	Low Power Idle	0.45watts	0.45watts
	Standby	0.15watts	0.15watts
	Sleep	0.10watts	0.10watts
Dimensions/Weight	Height	0.31" (8mm)	0.31" (8mm)
	Width	2.13" (54mm)	2.13" (54mm)
	Depth	3.09" (78.5mm)	3.09" (78.5mm)
	Weight	2.19 0z (62g)	2.19 0z (62g)
Environmental	Operating Temperature	41 - 131°F (5 to 55°)	41 - 131°F (5 to 55°)
	Non-Operating Temperature	-4 - 148°F (-20 to 65°)	-4 - 148°F (-20 to 65°)
	Operating Humidity	8 - 90% R.H.	8 - 90% R.H.
	Non-Operating Humidity	8 - 90% R.H.	8 - 90% R.H.
	Operating Vibration	2.0G (15-500 Hz)	2.0G (15-500 Hz)
	Non-Operating Vibration	5.0G (15-500 Hz)	5.0G (15-500 Hz)
	Operating Shock	500G/2.0ms	500G/2.0ms
	Non-Operating Shock	1,500G/1.0ms	1,500G/1.0ms
Acoustics	Idle Mode (Average)	1.8Bels	1.8Bels
	Seek Mode (Average)	2.3Bels	2.3Bels

1. One Gigabyte (1 GB) means 10^9 = 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 = 2^{30} = 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.
2. RoHS Compatible: This product is compatible with European Union Directive 2002/95/EC. Restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS), which restricts use of lead, cadmium, mercury, hexavalent chromium, PBB, and PBDE.
3. Buffer space available to the user.
4. Energy consumption efficiency is calculated based on power consumption divided by formatted capacity, as defined by Japanese law.

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.

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