

## HDD



## > MG03SCA SERIES ENTERPRISE CAPACITY HDD

The MG03SCA Enterprise Capacity SAS HDD models provide capacities up to 4 TB and 7,200 rpm performance, in a robust design engineered for nearline business-critical workloads. The MG03SCA series utilizes industry-standard 3.5-inch 26.1 mm height form factor. Equipped with 6.0 Gbit/s SAS interface, the Enterprise Capacity MG03SCA models help save rack space and reduce the footprint and operational burden of business critical servers and storage systems.

### > KEY FEATURES

- Industry Standard 3.5-inch 26.1 mm Height Form Factor
- Large-Capacity ( 4 / 3 / 2 / 1 TB models)
- 7,200 rpm Performance
- Dual-Port 6.0 Gbit/s SAS Interface

### > APPLICATIONS

- Engineered for Mid-Line / Nearline Business Critical Workloads
- Tier 2 Business-Critical Servers and Storage Systems
- Servers Supporting Application Workloads that Benefit from Large Capacity per Spindle
- Capacity-Optimized Data Center Storage Systems

### > SPECIFICATIONS

Model Number		MG03SCA400	MG03SCA300	MG03SCA200	MG03SCA100
Interface		SAS-2.0 ( 6.0 Gbit/s , 3.0 Gbit/s , 1.5 Gbit/s )			
Formatted Capacity		4 TB	3 TB	2 TB	1 TB
Performance	Interface Speed	6.0 Gbit/s Max.			
	Rotation Speed	7,200 rpm			
	Average Latency Time	4.17 ms			
	Buffer Size	64 MiB			
	Data Transfer Speed (Sustained)	165 MiB/s	155 MiB/s		
Logical Data Block Length		512 to 528 B			
Supply Voltage	Allowable Voltage	5 V ± 5 % 12 V ± 5 %			
Power Consumption	Read / Write	11.3 W Max.			
	Low Power Idle	6.0 W Typ.			

### > RELIABILITY

Model Number	Specification
MTTF	1,200,000 hours
Non-recoverable Error Rate	10 errors per 10 <sup>16</sup> bits read
24 x 7 Operation	Yes

## > MECHANICAL SPECIFICATIONS

Model Number	Specification
Width	26.1 mm Max.
Height	101.6 mm ± 0.25 mm Max.
Length	147 mm Max.
Weight	720 g Max.

## > ENVIRONMENTAL LIMITS

Item	Specification	
Temperature	Operating	5 °C to 55 °C
	Non-Operating	- 40 °C to 70 °C
Humidity	Operating	5 % to 90 % R.H.
	Non-Operating	5 % to 95 % R.H.
Shock	Operating	686 m/s <sup>2</sup> { 70 G } ( 2 ms duration )
	Non-Operating	2,940 m/s <sup>2</sup> { 300 G } ( 2 ms duration )
Vibration	Operating	7.35 m/s <sup>2</sup> { 0.75 G } ( 5 - 300Hz ) 2.45 m/s <sup>2</sup> { 0.25 G } ( 300 - 500Hz )
	Non-Operating	49 m/s <sup>2</sup> { 5.0 G } ( 5 - 500Hz )
Altitude	Operating	- 305 m to +3,048 m
	Non-Operating	- 305 m to +12,192 m

Definition of capacity: A megabyte (MB) as 1,000,000 bytes, a gigabyte (GB) as 1,000,000,000 bytes and a terabyte (TB) as 1,000,000,000,000 bytes. A computer operating system, however, reports storage capacity using powers of 2 for the definition of 1GB = 2<sup>30</sup> = 1,073,741,824 bytes and therefore shows less storage capacity. Available storage capacity (including examples of various media files) will vary based on file size, formatting, settings, software and operating system, such as Microsoft Operating System and/or pre-installed software applications, or media content. Actual formatted capacity may vary.

"3.5-inch" means the form factor of HDDs. They do not indicate drive's physical size.

Read and write speed may vary depending on the host device, read and write conditions, and file size.

MTTF (Mean Time to Failure) is not a guarantee or estimate of product life; it is a statistical value related to mean failure rates for a large number of products which may not accurately reflect actual operation. Actual operating life of the product may be different from the MTTF.

A kibibyte (KiB) means 2<sup>10</sup>, or 1,024 bytes, a mebibyte (MiB) means 2<sup>20</sup>, or 1,048,576 bytes, and a gibibyte (GiB) means 2<sup>30</sup>, or 1,073,741,824 bytes.

Before creating and producing designs and using, customers must also refer to and comply with the latest versions of all relevant TOSHIBA information and the instructions for the application that Product will be used with or for.