# TOSHIBA

## End of Sales

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## MG04ACAxxxN SERIES ENTERPRISE CAPACITY HDD

#### KEY FEATURES

- Large Capacity (4 / 2 / 1 TB Models) in an industry standard 3.5-inch Form-Factor
- 7,200rpm Performance
- SATA 6Gbit/s Interface
- Designed for 24 x 7 workloads of up to 550 total TB Transferred per Year
- 512 Native Sector Technology
- Rotational Vibration Technology
- Sanitize Instant Erase (SIE) Option Available

#### > APPLICATIONS

- Engineered for Mid-line / Nearline Business Critical Workloads
- Tier 2 and Business-Critical Servers and Storage Systems
- Servers Supporting Workloads that Benefit from High Capacity per Spindle
- Capacity-Optimized Data Center Storage Systems
- Applications and hypervisors that require 512 Native Sector Technology

### > MAIN SPECIFICATIONS

Мо	del Number	MG04ACA400N	MG04ACA200N	MG04ACA100N
Interface		SATA(6.0 Gbit/s,3.0 Gbit/s,1.5 Gbit/s)		
Formatted Capacity		4 TB	2 TB	1 TB
Performance	Interface Speed	6.0 Gbit/s Max.		
	Rotation Speed	7,200 rpm ±0.1 %		
	Average Latency Time	4.17 ms		
	Buffer Size	128 MiB		
	Data Transfer Speed (Sustained)	195 MiB/s		
Logical Data Block Length	HOST	512 B		
	DISK	512 B		
Supply Voltage	Allowable Voltage		5 V ± 5% 12 V ± 5 %	
Power Consumption	Read / Write	11.3 W		
	Low Power Idle	6.0 W Typ.		

### MECHANICAL SPECIFICATIONS

Model Number	MG04ACAxxxN
MTTF	1,400,000 hours
Non-recoverable Error Rate	10 errors per 10 <sup>16</sup> bits read
24 x 7 Operation	Yes
Workloads	550 TB/year



Product image may represent a design model.

#### > RELIABILITY

Model Number	MG04ACAxxxN
Height	26.1 mm Max.
Width	101.85 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. (No condensation)	
	Non-Operating	5 % to 95 % R.H. (No condensation)	
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 to 300 Hz ) 2.45 m/s <sup>2</sup> { 0.25 G } ( 300 to 500 Hz )	
	Non-Operating	49 m/s² { 5.0 G } ( 5 to 500 Hz )	
Altitude	Operating	-305 m to 3,048 m	
	Non-Operating	-305 m to 12,192 m	

Definition of capacity: Toshiba defines 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 bytes. A computer operating system, however, reports storage capacity using powers of 2 for the definition of  $1GB = 2^{30} = 1,073,741,824$  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.

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.

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.

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

SIE: Sanitize Instant Erase. SIE is a function to invalidate the data recorded on the magnetic disks at a blink.

"2.5-inch" and "3.5-inch" mean the form factor of HDDs or SSDs. They do not indicate drive's physical size.

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.