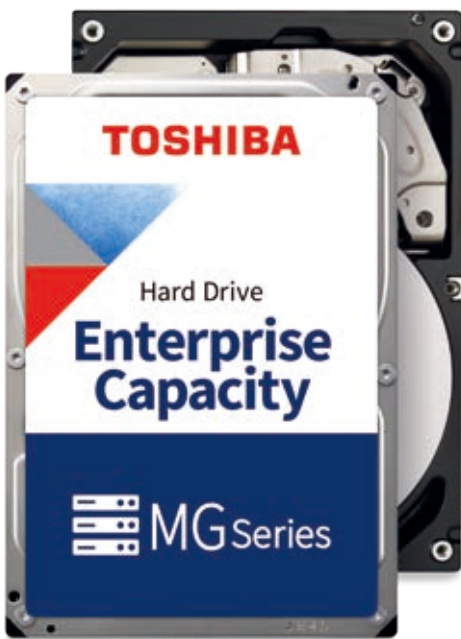


TOSHIBA



MG Series Enterprise Capacity Hard Drives

As Big Data drives demand for more distributed storage in the cloud and on premises, enterprise server and storage systems need to be built using trusted solutions. Toshiba's Enterprise Capacity Hard Drive – MG Series offers formatted capacities as high as 24 TB with interface options including SATA and SAS and delivers 24/7 operation at a workload of 550 TB/year. The MG Series is ideal for enterprise storage array and industrial server and storage systems. It provides the capacity and advanced technologies to meet the special demands of datacenter and cloud-scale infrastructures.



Use for

- Enterprise Server
- Enterprise Storage
- Cloud Scale up and Scale out Storage
- Archive Systems
- Industrial and Surveillance Storage

Top Features

- 3.5-inch SATA/SAS
- 7200 rpm
- 550 TB/year workload
- 24/7 operation
- Persistent Write Cache Technology

Capacities

24 TB	22 TB	20 TB	18 TB	16 TB	14 TB	
12 TB	10 TB	8 TB	6 TB	4 TB	2 TB	1 TB



MG Series



Enterprise Hard Drives

Capacity *1		24 TB	22 TB			20 TB		
Model Number	SATA	4Kn	-	-	-	-	-	MG10ACA20TA
		512e	MG11ACA24TE*2	MG11ACA22TE*2	MG10AFA22TE*2	MG11ACA20TE*2	MG10AFA20TE*2	MG10ACA20TE
	SAS	4Kn	-	-	-	-	-	MG10SCA20TA
		512e	MG11SCA24TE*2	MG11SCA22TE*2	MG10SFA20TE*2	MG11SCA20TE*2	MG10SFA20TE*2	MG10SCA20TE

Basic Specifications

Mechanical Design	He			
Recording Technology	CMR			
Form Factor	3.5-inch*3 (147 (L) x 101.85 (W) x 26.1 (H) mm (Max))			
Weight	730 g	720 g	730 g	720 g
Interface *4	SATA : 6.0 Gbit/s SAS : 12.0 Gbit/s			
Rotation Speed	7200 rpm			
Buffer Size *5	1 GiB	512 MiB	1 GiB	512 MiB

Reliability

MTTF / MTBF *6	2.5 M hours			
Maximum rated workload *7	550 Total TB Transferred per Year			

Environmental

Temperature	Operating	5 to 55 °C		
Vibration	Operating	7.35 m/s ² {0.75 G} (5 to 300 Hz), 2.45 m/s ² {0.25 G} (300 to 500 Hz)		
	Non-operating	29.4 m/s ² {3.0 G} (5 to 500 Hz)		
Shock	Non-operating	1960 m/s ² {200 G} (2 ms duration)		
Acoustics	Idle	20 dB		

*1 Definition of capacity: One terabyte (TB) = one trillion bytes, but storage capacity actually available may vary depending on operating environment and formatting. Available storage capacity (including examples of various media files) will vary based on file size, formatting, settings, software and operating system and/or pre-installed software applications, or media content. Actual formatted capacity may vary.

*2 Default format is 512e. Convertible to 4kn format.

*3 "3.5-inch" means the form factor of HDDs. They do not indicate drive's physical size.

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

*5 A mebibyte (MiB) means 1 048 576 bytes.

*6 MTTF/MTBF (Mean Time to Failure/Mean Time Between Failures) 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/MTBF.

*7 Workload is a measure of the data throughput of the year, and it is defined as the amount of data written, read or verified by commands from the host system.

- Product image may represent a design model.
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MG Series



Enterprise Hard Drives

Capacity *1		18 TB				16 TB		14 TB		12 TB
Model Number	SATA	4Kn	-	MG10ACA18TA	MG09ACA18TA	-	MG09ACA16TA	-	MG09ACA14TA	MG09ACA12TA
		512e	MG11ACA18TE*2	MG10ACA18TE	MG09ACA18TE	MG11ACA16TE*2	MG09ACA16TE	MG11ACA14TE*2	MG09ACA14TE	MG09ACA12TE
	SAS	4Kn	-	MG10SCA18TA	MG09SCA18TA	-	MG09SCA16TA	-	MG09SCA14TA	MG09SCA12TA
		512e	MG11SCA18TE*2	MG10SCA18TE	MG09SCA18TE	MG11SCA16TE*2	MG09SCA16TE	MG11SCA14TE*2	MG09SCA14TE	MG09SCA12TE

Basic Specifications

Mechanical Design	He									
Recording Technology	CMR									
Form Factor	3.5-inch*3 (147 (L) x 101.85 (W) x 26.1 (H) mm (Max))									
Weight	730 g	720 g			730 g	720 g	730 g	705 g	690 g	
Interface *4	SATA : 6.0 Gbit/s SAS : 12.0 Gbit/s									
Rotation Speed	7200 rpm									
Buffer Size *5	1 GiB	512 MiB			1 GiB	512 MiB	1 GiB	512 MiB		

Reliability

MTTF / MTBF *6	2.5 M hours									
Maximum rated workload *7	550 Total TB Transferred per Year									

Environmental

Temperature	Operating	5 to 55 °C									
Vibration	Operating	7.35 m/s ² {0.75 G} (5 to 300 Hz), 2.45 m/s ² {0.25 G} (300 to 500 Hz)									
	Non-operating	29.4 m/s ² {3.0 G} (5 to 500 Hz)									
Shock	Non-operating	1960 m/s ² {200 G} (2 ms duration)	2450 m/s ² {250 G} (2 ms duration)	1960 m/s ² {200 G} (2 ms duration)	2450 m/s ² {250 G} (2 ms duration)	1960 m/s ² {200 G} (2 ms duration)	2450 m/s ² {250 G} (2 ms duration)	1960 m/s ² {200 G} (2 ms duration)	2450 m/s ² {250 G} (2 ms duration)	1960 m/s ² {200 G} (2 ms duration)	2450 m/s ² {250 G} (2 ms duration)
Acoustics	Idle	20 dB									

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Enterprise Hard Drives

Capacity *1			10 TB	8 TB	6 TB	4 TB	2 TB	1 TB
Model Number	SATA	512e*2	MG10ADA10TE	MG10ADA800E	MG10ADA600E	MG10ADA400E	MG10ADA200E	MG10ADA100E
		512n	-	-	-	MG10ADA400N	MG10ADA200N	MG10ADA100N
	SAS	512e*2	MG10SDA10TE	MG10SDA800E	MG10SDA600E	MG10SDA400E	MG10SDA200E	-
		512n	-	-	-	MG10SDA400N	MG10SDA200N	-

Basic Specifications

Mechanical Design	Air						
Recording Technology	CMR						
Form Factor	3.5-inch*3 (147 (L) x 101.85 (W) x 26.1 (H) mm (Max))						
Weight	755 g	730 g	710 g	690 g	670 g		
Interface *4	SATA : 6.0 Gbit/s SAS : 12.0 Gbit/s						
Rotation Speed	7200 rpm						
Buffer Size *5	512 MiB						

Reliability

MTTF / MTBF *6	2.0 M hours						
Maximum rated workload *7	550 Total TB Transferred per Year						

Environmental

Temperature	Operating	5 to 55 °C					
Vibration	Operating	7.35 m/s ² {0.75 G} (5 to 300 Hz), 2.45 m/s ² {0.25 G} (300 to 500 Hz)					
	Non-operating	29.4 m/s ² {3.0 G} (5 to 500 Hz)					
Shock	Non-operating	2450 m/s ² {250 G} (2 ms duration)					
Acoustics	Idle	34 dB					

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