### **TOSHIBA**



External and Internal Hard Drives

Write your story.



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# External Storage

# Save your special memories on a special hard drive.

Storage is one of the most vital components of our ever expanding digital lifestyles. In order to suit the various demands, Toshiba offers a custom-designed range of external storage products to simplify your everyday life. Whether you are looking for a hard drive with auto-backup software for your laptop or PC, or a safe place for your blogging content – with Toshiba you find the right solution.

Toshiba External Storage's product range is clearly sorted according to performance criteria and features. With the clear colour coding and the shopping guide, customers immediately know which products best meet their requirements.



#### Toshiba Premium

Toshiba products for premium users looking for an elegant design, absolute reliability and sophisticated additional functions. Toshiba storage without limits.



#### Toshiba Advanced

The Advanced storage products are designed for advanced users, providing high quality and high speed with important additional functions.



#### Toshiba Standard

The product range for users wanting top quality, reliable functionality and essential features.

### Canvio Premium

A better class of storage





2.5" 2.5" External Hard Drive

Aluminium finish

SuperSpeed USB 3.0 port

USB-powered

Auto-backup software (for download)

Password protection software (for download)

Type-C adapter (Type-A to -C)

Soft pouch included

3-year warranty

#### Colours



#### Capacities

4 2 1 TB TB TB

#### High-class storage for all your files

Up to 4 TB housed in a stylish aluminium design with diamond-cut edges make this drive the ultimate companion for any device, no matter if on your desk or on the move. With several useful features, the Canvio Premium keeps your data well protected.

### Canvio for Desktop

High capacity, high speed



#### Stylish and powerful

The Canvio for Desktop's enclosure comes in a stylish piano black finish and allows for horizontal as well as vertical positioning. Thanks to a special internal shock sensor and ramp loading technology, your data is always protected.



3.5" 3.5" External Hard Drive

Stylish and versatile design

SuperSpeed USB 3.0/2.0 port

iiii High Performance

Security lock slot

Colour



Capacities

6 5 4

#### **EXTERNAL HDDs**

### Canvio Advance

More terabytes, more colours



- 2.5" 2.5" External Hard Drive
- Glossy piano finish
- SuperSpeed USB 3.0 port
- USB-powered
- Auto-backup software (for download)
  - Password protection software (for download)

#### Colours



#### Capacities

4 2 1 TB TB TE



#### Multiple colours and features

The USB-powered Canvio Advance puts up to 4 TB of external storage and several useful features into the palm of your hand. The sleek, glossy chassis comes in a variety of colours to compliment your style.

### Canvio Alu

Solid portable storage



#### Durable elegance

With a sleek and solid aluminium casing, Canvio Alu series portable hard drives are not only stylishly designed but also provide durable protection for your data. Thanks to its built-in shock sensor and ramp loading technology, the Canvio Alu will keep your data safe from life's bumps and scrapes.



2.5" 2.5" External Hard Drive

Aluminium casing

High speed USB 3.0 port

USB-powered

Auto-backup software (for download)

Password protection software (for download)

#### Colours



Capacities

2 1 500 TB TB GB

### Canvio Basics

Super speed storage made simple



TOSHIBA

STANDARD \*

2.5" 2.5" External Hard Drive

Matt finish



SuperSpeed USB 3.0 port



USB-powered



Plug-and-play operation

#### Colour



Capacities

4 2 1 500

#### A place for all your files

High capacity storage in a conveniently compact, matt black casing. Available in several capacity sizes (up to 4 TB), Canvio Basics hard drives are perfect for storing data, music, movies, and pictures.

### Canvio Ready

Easy storage at super speed





2.5" 2.5" External Hard Drive

**\^** 

SuperSpeed USB 3.0 port



USB-powered



Drag and drop use

#### Colour



Capacities

4 2 1 500 тв тв тв св

#### A place for all your files

The Canvio Ready is available in a range of different storage sizes up to 4 TB. So whatever your portable storage requirements, whether you're saving documents, photos, movies, or a combination, Canvio Ready provides the ideal, high-capacity solution.

#### External HDDs

Model	Range	Casing	Part Number	Capacity	Interface	PC¹	Backup Software	Password Lock	Additional Features
Canvio Premium	***								
0			HDTW240ES3CA	4 TB					
	TOSHIBA	Aluminium	HDTW220ES3AA	2 TB	USB 3.0 USB 2.0	~	<b>✓</b>	✓	Soft pouch, Type-C connector
	TOSHIBA PERIOR ***  TOSHIBA PERIOR ***  TOSHIBA PERIOR ***  TOSHIBA ADMACED ***  TOSHIBA ADMACED ***  TOSHIBA ADMACED ***		HDTW210ES3AA	1 TB	035 2.0				Type-c connector
-		Aluminium HDTW240EB3CA HDTW220EB3AA HDTW210EB3AA HDWC360EK3JB HDWC350EK3JB HDWC340EK3JB HDWC340EK3JB HDTC940ER3CA HDTC920ER3AA HDTC910ER3AA HDTC910ER3AA HDTC910EL3AA HDTC940EW3CA HDTC920EW3AA HDTC910EW3AA HDTC910EW3AA HDTC910EW3AA HDTC910EW3AA HDTC940EW3CA		4 TB					0.0
				2 TB	USB 3.0 USB 2.0	~	✓	✓	Soft pouch, Type-C connector
	TOSHIBA  ADDINGED **  TOSHIBA  ADDINGED **  TOSHIBA  ADDINGED **  TOSHIBA  ADDINGED **		HDTW210EB3AA	1 TB					,,
Canvio for Desktop	p ***								
			HDWC360EK3JB	6 TB					
			HDWC350EK3JB	5 TB	USB 3.0 USB 2.0	~	-	-	Security lock slot
			HDWC340EK3JB	4 TB					
Canvio Advance	k*								
190000			HDTC940ER3CA	4 TB					
				2 TB	USB 3.0	~	<b>~</b>	<b>~</b>	-
	ADVANCED **	GIOSS	HDTC910ER3AA	1 TB	USB 2.0				
PORTINGA C			HDTC940EL3CA	4 TB					
			HDTC920EL3AA	2 TB	USB 3.0 USB 2.0	~	✓	✓	-
		01033	HDTC910EL3AA	1 TB	035 2.0				
		Diama	HDTC940EW3CA	4 TB	LICE 2 A				
			HDTC920EW3AA	2 TB	USB 3.0 USB 2.0	~	✓	✓	-
			HDTC910EW3AA	1 TB					
*Januari	TOOLUDA	Piano	HDTC940EK3CA	4 TB	USB 3.0				
		Gloss	HDTC920EK3AA	2 TB	USB 2.0	~	<b>~</b>	<b>*</b>	-
			HDTC910EK3AA	1 TB					
Canvio Alu ★★									
	TOCHIDA		HDTH320ER3AB	2 TB	USB 3.0				
1	ADVANCED **	Aluminium	HDTH310ER3AB	1 TB	USB 2.0	~	~	<b>~</b>	-
			HDTH305ER3AB	500 GB					
	TOSHIBA		HDTH320EK3AB	2 TB	USB 3.0				
Mark Sand	ADVANCED **	Aluminium	HDTH310EK3AB	1 TB	USB 2.0	~	~	<b>~</b>	-
			HDTH305EK3AB	500 GB					
	TOSHIBA		HDTH320ES3AB	2 TB	USB 3.0				
	ADVANCED **	Aluminium	HDTH310ES3AB	1 TB	USB 2.0	~	~	<b>~</b>	-
			HDTH305ES3AB	500 GB					
Canvio Basics ★			LIDTO 44-THE						
THE RESERVE OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN COLUMN TW			HDTB440EK3CA	4 TB					
	TOSHIBA STANDARD *	Matt	HDTB420EK3AA	2 TB	USB 3.0 USB 2.0	~	-	-	-
			HDTB410EK3AA	1 TB	030 2.0				
Camila Day 1 of			HDTB405EK3AA	500 GB					
Canvio Ready ★			LIDTD2405W2C4	4.70					
			HDTP240EK3CA	4 TB					
	TOSHIBA  STANDARD *	Dot pattern	HDTP220EK3CA HDTP210EK3AA	2 TB 1 TB	USB 3.0 USB 2.0	~	-	-	-
			HDTP205EK3AA	500 GB	22220				
			יוסוו בטטבווטתא	300 GD					

 $<sup>^{1}\,\</sup>mathrm{Requires}$  reformatting for mac OS.

# Internal Storage

Everything is possible – with the right tools.















### NAS Hard Drives

Offering special reliability for NAS and other highperformance storage systems, Toshiba's NAS drives are optimized to meet the reliability, endurance, performance, and scalability requirements of 24/7 high-capacity storage for personal, home office, and small business use.

### Performance Hard Drives

Delivering reliable storage, large capacities, and high performance, Toshiba's Performance hard drives are the perfect choice for PC gamers, graphic designers, and professionals with demanding storage requirements.





### Surveillance Hard Drives

In a society where 24/7 security is essential and real-time data availability is paramount, intelligent surveillance analysis starts with secure and reliable storage. Toshiba's Surveillance drives offer high reliability and are designed to cope with the concurrent access requirements of CCTV systems.

### Video Streaming Hard Drives

Toshiba's Video Streaming hard drives combine reliability and performance, making them ideal for smooth streaming, seamless editing and recording with all of the efficiency you need.



### PC Hard Drives

Boost the storage capacity of your laptop, PC, or games console to help ensure fast, stable file transfer, for smooth and responsive computing. Designed for professionals and everyday users who demand high-performing powerful storage.

# Enterprise Hard Drives

Designed for server- and storage environments where high data capacity and performance matters, Toshiba's reliable Enterprise drives offer the necessary capacities and performance features required to run business- and mission-critical applications in enterprise-, datacenter and cloud environments.



### N300

Built for 24/7 reliability



#### Toshiba's N300

The 3.5-inch internal hard disk offers unprecedented reliability for NAS and other high-performance storage systems. It is optimized to meet the reliability, endurance, performance, and scalability requirements of 24/7 high-capacity storage for personal, home office, and small business use.



SATA 3.5" SATA Hard Drive

RPM 7,200 rpm

512 MB (16 TB) buffer 256 MB (14 | 12 | 10 TB) buffer 128 MB (8 | 6 | 4 TB) buffer

Toshiba Stable Platter Technology

High reliability and enhanced real-time performance

High-endurance design

3 3-year warranty

#### Capacities

16 14 12 10 8 TB TB TB TB TB 6 4 TB TB

#### Use for:

- NAS and Multimedia Server
- Desktop RAID and Server
- Private Cloud Storage
- Small Business Server and Storage

### X300

Level up your drive performance



#### Toshiba's X300

This 3.5-inch internal hard drive is designed for your professional or gaming PC – delivering reliable, large capacity, incredibly high-performance storage, made possible by a number of advanced features, including an ultra-high 512 MB (16 TB) buffer. It even features improved positional accuracy for stable recording. The X300 is ideal for PC gamers, graphic designers, and other users with demanding storage requirement.



SATA 3.5" SATA Hard Drive

RPM 7,200 rpm

512 MB (16 TB) buffer 256 MB (14 | 12 | 10 TB) buffer 128 MB (8 | 6 | 5 | 4 TB) buffer

Toshiba Stable Platter Technology

Toshiba Dynamic Cache Technology

#### Capacities

16 14 12 10 8 TB TB TB TB TE 6 5 4 TB TB TB

#### Use for:

- Powerful Desktop Workstations
- · All-in-one PCs
- Gaming computers
- Home Media computers

### S300

### Capture every detail



#### Toshiba's S300

Never miss a thing. The Toshiba S300 Surveillance Hard Drives hold all the capacity you need to take on up to 64 high-resolution surveillance video cameras, with equally high-performance and surveillance-critical reliability, designed to work 24/7.



SATA 3.5" SATA Hard Drive

RPM 7,200 rpm (10 | 8 | 6 TB) | 5,400 rpm (5 | 4 TB)

256 MB (10 | 8 | 6 TB) buffer 128 MB (5 | 4 TB) buffer

64Z: Up to 64 cameras

24/7 24/7 operation

3-year warranty

#### Capacities

5 тв 10 TB TB TB

#### Use for:

- Surveillance Digital Video Recorders (sDVR)
- Surveillance Network Video Recorders (sNVR)
- Hybrid sDVR (analog and IP)
- RAID Storage Arrays for Surveillance

## V300

Stream, record, and edit



#### Toshiba's V300

The Toshiba V300 Video Streaming Hard Drive lets you stream, record, edit, and play video content, with all of the efficiency you need. DVR, STB, or NVR - a 64 MB buffer helps keep up with your demands. Temperature control technology extends service life for added reliability. The V300 is ready to stream, edit, and record when you are.



SATA 3.5" SATA Hard Drive

5,940 rpm (3 TB) 5,700 rpm (2 TB | 1 TB | 500 GB)

64 MB buffer

[//) Silent Seek Technology Up to 16 cameras

24/7 24/7 operation

Temperature control

#### Capacities

16*5* (-

3 **TB** 500

#### Use for:

- Video Editing Systems
- Set-Top Box (STB)
- Digital Video Recorders (DVR)
- Network Video Recorders (NVR)
- Video Surveillance Systems

### P300

Performance meets reliability



#### Toshiba's P300

The 3.5-inch internal hard drive delivers a high performance for professionals. With its dual-stage actuator, you can count on smooth, responsive computing. What's more, your data and media is secured with a ramp loading design, as well as a shock sensor.



SATA 3.5" SATA Hard Drive

RPM 7,200 rpm

64 MB buffer

Advanced Format

#### Capacities

3 2 1 500 TB TB TB GB

#### Use for:

- Powerful Desktop Workstations
- All-in-one PCs
- Desktop PCs
- · External enclosures
- Gaming computers

### L200

Take your laptop to the next level



#### Toshiba's L200

This 2.5-inch internal hard drive is designed for everyday laptop users and gamers – and it's ideal for boosting and upgrading the storage capacity of your laptop PC or games console by up to 2 TB. Perpendicular Magnetic Recording and Tunnel Magneto-Resistive technologies also ensure fast, stable recording that makes the most of your hard drive space.



SATA 2.5" SATA Hard Drive

RPM 5,400 rpm

128 MB (2 TB | 1 TB 7 mm) buffer 8 MB (1 TB 9.5 mm | 500 GB 7 mm | 500 GB 9.5 mm) buffer

Toshiba Dynamic Cache Technology

Advanced Format

#### Capacities

2 1 500 TB TB GB

#### Use for:

- Notebooks
- Game consoles
- · External enclosures

#### **Internal** HDDs

Model	Retail Number	Bulk Number	Capacity	Interface	RPM	Cache	Height	24/7 Operation	Warranty (years)
N300 NAS Hard	Drive 3.5"								
	-	HDWG31GUZSVA	16 TB			512 MB			
5	HDWG21EEZSTA	HDWG21EUZSVA	14 TB			256 MB			
TOSHIRA	Hard Drive 3.5"  - HDWG21EEZSTA HDWG21EU HDWG21EEZSTA HDWG21EU HDWG11AEZSTA HDWG11AU HDWN180EZSTA HDWN180U HDWN160EZSTA HDWN160U HDWQ140EZSTA HDWN160U HDWQ140EZSTA HDWR21GU HDWR21EEZSTA HDWR21EU HDWR21EEZSTA HDWR21EU HDWR11AEZSTA HDWR11AU HDWF180EZSTA HDWF180U HDWF180EZSTA HDWE160U HDWE160EZSTA HDWE150U HDWF180EZSTA HDWE150U HDWF180U	HDWG21CUZSVA	12 TB			256 MB			
NAS Systems	HDWG11AEZSTA	HDWG11AUZSVA	10 TB		7,200	256 MB	26.1 mm	Supported	3
HH N300	HDWN180EZSTA	HDWN180UZSVA	8 TB	o obit/s		128 MB			
	HDWN160EZSTA	HDWN160UZSVA	6 TB			128 MB			
	HDWQ140EZSTA	HDWQ140UZSVA	4 TB			128 MB			
X300 Performar	ice Hard Drive 3.5"								
	-	HDWR31GUZSVA	16 TB			512 MB			
	HDWR21EEZSTA	HDWR21EUZSVA	14 TB			256 MB			
1	HDWR21CEZSTA	HDWR21CUZSVA	12 TB	SATA 6 Gbit/s 7,200  SATA 6 Gbit/s 7,200  SATA 7,200  5,400  5,400  5,400  5,700  5,700  SATA 6 Gbit/s 7,200		256 MB			
nerro.	HDWR11AEZSTA	HDWR11AUZSVA	10 TB	SATA	7 200	256 MB	26.1 mm		2
Performance	HDWF180EZSTA	HDWF180UZSVA	8 TB	6 Gbit/s	7,200	128 MB	26.1 mm	-	2
	HDWE160EZSTA	HDWE160UZSVA	6 TB		7,200 256 M 128 M 128 M 128 M 128 M 128 M 256 M 258 M				
	HDWE150EZSTA	HDWE150UZSVA	5 TB			128 MB			
	HDWE140EZSTA	HDWE140UZSVA	4 TB			128 MB			
S300 Surveillan	ce Hard Drive 3.5"								
	-	HDWT31AUZSVA	10 TB		7,200	256 MB			
TOGHIEA	-	HDWT380UZSVA	8 TB		7,200	256 MB			
Surveillance	-	HDWT360UZSVA	6 TB		7,200	256 MB	26.1 mm	Supported	3
<b>◆</b> 5300	-	HDWT150UZSVA	5 TB	o obicys	5,400	128 MB			
	-	HDWT140UZSVA	4 TB		5,400	128 MB			
V300 Video Stre	aming Hard Drive 3.5	"							
1	-	HDWU130UZSVA	3 TB		5,940	64 MB			
-	-	HDWU120UZSVA	2 TB	SATA	5,700	64 MB	26.1 mm	Cupported	2
Streaming	-	HDWU110UZSVA	1 TB	6 Gbit/s	5,700	64 MB	26.1 mm	Supported	2
	-	HDWU105UZSVA	500 GB		5,700	64 MB			
P300 Desktop P	C Hard Drive 3.5"								
, ,	HDWD130EZSTA	HDWD130UZSVA	3 TB			64 MB			
TOSHIBA	HDWD120EZSTA	HDWD120UZSVA	2 TB	SATA	7.200	64 MB	26.1		2
Desktop PC	HDWD110EZSTA	HDWD110UZSVA	1 TB	6 Gbit/s	7,200	64 MB	26.1 mm	-	2
- 7330	HDWD105EZSTA	HDWD105UZSVA	500 GB			64 MB			
L200 Laptop PC	Hard Drive 2.5"								
	HDWL120EZSTA	HDWL120UZSVA	2 TB	SATA		128 MB	9.5 mm		
	HDWL110EZSTA	HDWL110UZSVA	1 TB	6 Gbit/s		128 MB	7.0 mm		
TOSHISA		HDWJ110UZSVA							
Laptop PC	-		1 TB	SATA 3 Gbit/s	5,400	8 MB	9.5 mm	-	2
L200	-	HDWJ105UZSVA	500 GB	3 GDIL/S		8 MB	9.5 mm		
	-	HDWK105UZSVA	500 GB	SATA 6 Gbit/s		8 MB	7.0 mm		

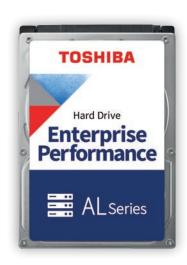


#### Solutions that live up to the highest standards.

Toshiba provides several classes of enterprise HDDs to support both mission- and business-critical applications that demand reliable performance in 24/7 operating environments. The Enterprise Performance HDDs are designed for high-performance server and storage systems that require quick response and rapid data transfer. Enterprise Capacity HDDs are suitable for storage systems and data centers that require large amounts of data storage capacity.

### **AL Series**

Enterprise Performance HDD



#### Use for:

Mission Critical Enterprise Server and Storage Systems | Business Database Server with High Workloads | Big Data Analytics | Virtualized Storage Systems

- Low Latency
- Persistent Write Cache Technology
- Unlimited workload
- Flexibility in block size
- Optional: Self-Encryption, Instant Erase
- 24/7 operation
- 5-year warranty



#### **AL Series**

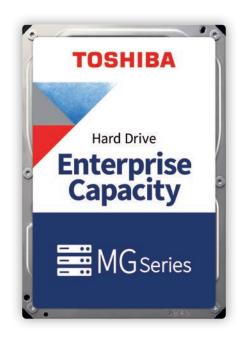
High performance storage for mission critical applications, such as Tier 1 enterprise servers hosting transaction oriented applications.

Main Differences	AL14SX	AL15SE
Capacity (GB)	300   600   900	300   600   900   1,200 1,800   2,400
I/F speed	SAS 12	Gbit/s
RPM	15,000	10,500
Cache	128	MB
MTTF	2.0 mil	l. hours



## MG Series

Enterprise Capacity HDD



#### Use for:

Business Critical Enterprise Server and Storage Systems | Enterprise Storage Arrays | Cloud and Hyperscale Storage Systems | Big Data, Distributed File Systems | Enterprise Archive and Data Recovery Systems | Industrial Server- and Storage Systems

- Persistent Write Cache Technology
- 550 TB/year workload
- Flexibility in block size
- Optional: Self-Encryption, Instant Erase
- 24/7 operation
- 5-year warranty

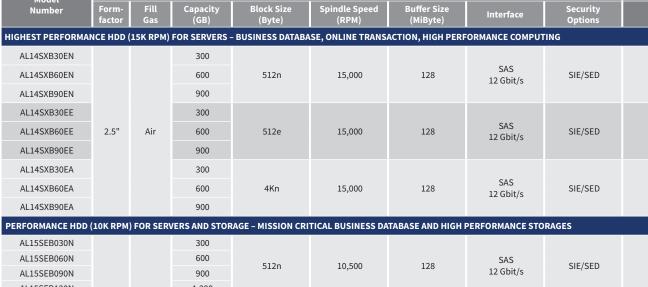


#### **MG Series**

Capacity-optimized enterprise storage for external networked storage arrays, enterprise backup and restore infrastructure, and access intensive bulk-storage systems and applications.

Main Differences	МС	G04	MG05	MG06	MG07	MG08
Capacity (TB)	1	2   4   6	6   8	6   8   10	12   14	16
I/F speed	-	SAS 12 Gbit/s	-		SAS 12 Gbit/s	
.,. speed			SATA 6	Gbit/s		
RPM			7,2	200		
Cache		128 MB		256	MB	512 MB
Sector length	512n	512e, 4Kn, 512n		512e	, 4Kn	
MTTF	1.4	mill.	2.0 mill.		2.5 mill.	
Sealed		А	ir		Hel	ium

#### Enterprise HDDs



Specification



**AL Series** 

Enterprise Performance HDD

	AL14SXB60EA			600	4Kn	15,000	128	SAS 12 Gbit/s	SIE/SED	
	AL14SXB90EA	,		900						
Р	ERFORMANCE HDD	(10K RPM	) FOR SER\	ERS AND STOR	AGE – MISSION CRI	TICAL BUSINESS DA	TABASE AND HIGH	PERFORMANCE STO	RAGES	
	AL15SEB030N			300						
	AL15SEB060N			600	512n	10 500	120	SAS	SIE/SED	
	AL15SEB090N			900	31211	10,500	10,500 128 12 Gbit/s SIE/		SIE/SED	
	AL15SEB120N			1,200						
	AL15SEB06EQ			600						
	AL15SEB09EQ			900				0.00		
	AL15SEB12EQ	2.5"	Air	1,200	512e	10,500	128		SIE/SED	
	AL15SEB18EQ	2.5	All	1,800						
	AL15SEB24EQ			2,400						
	AL15SEB06EP			600						
	AL15SEB09EP			900				0.00		
	AL15SEB12EP			1,200	4Kn	10,500	128	SAS 12 Gbit/s	SIE/SED	
	AL15SEB18EP			1,800				35.0,0		
	AL15SEB24EP			2,400						

#### Footnotes

- Definition of capacity: A gigabyte (GB) is 1,000,000,000 bytes and a terabyte (TB) is 1,000,000,000,000 bytes. A computer operating system, however, reports storage capacity using powers of 2 for the definition of  $1GB = 2^m$  bytes = 1,073,741,824 bytes and  $1TB = 2^m = 1,099,511,627,776$  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 and/or pre-installed software applications, or media content. Actual formatted capacity may vary.
- A mebibyte (MiB) means 2<sup>20</sup>, or 1,048,576 bytes.
- $_{\rm *,2.5-inch"}$  and  $_{\rm *,3.5-inch"}$  mean the form factor of HDDs. They do not indicate drive's physical size.
- Product image may represent a design model.
- Number of surveillance cameras support capability is defined by performance simulation with High Definition cameras as 2 MiB/s rate.

		Performa	Performance Reliability						
Average Latency (ms)	Average S (ms) read	eek Time (ms) write	Data Rate (sustained) (MB/s)	Operating Power (W) typ.	MTTF (hrs)	Unrecoverable Error Rate	Duty	Rated Workload (TB/year)	Warranty (years)
2.0	2.95	3.25	273	9.0	2.0 mill.	1 in 10 <sup>16</sup>	24/7	unlimited	5
2.0	2.95	3.25	304	9.0	2.0 mill.	1 in 10 <sup>16</sup>	24/7	unlimited	5
2.0	2.95	3.25	304	9.0	2.0 mill.	1 in 10 <sup>16</sup>	24/7	unlimited	5
			236	6.5					
2.86	4.2	4.6		7.0	2.0 mill.	1 in 10 <sup>16</sup>	.016 24/7	unlimited	5
2.00	4.2	4.0	245	7.0	2.0 111111.	111110			
				8.1					
				6.5					
				7.0					
2.86	4.2	4.6	273	7.0	2.0 mill.	1 in 10 <sup>16</sup>	24/7	unlimited	5
				8.1					
				8.7					
				6.5					
				7.0					
2.86	4.2	4.6	273	7.0	2.0 mill.	1 in 10 <sup>16</sup>	1016 24/7	unlimited	5
				8.1					
				8.7					

<sup>\*</sup> A = Advanced Format Sector (4k), E = 512 byte Sector Emulated, N = 512 byte Sector Native, P = 4 Kn Q=512e

 $<sup>\, \</sup>bullet \,$  Toshiba refers to "storage products" as products that can store data, such as HDD.

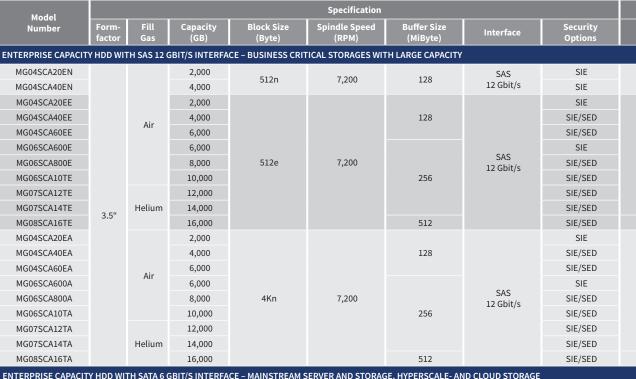
MTTF (Mean Time to Failure) is not a guarantee or estimate of product life; it is a statistical value related
to mean failure rates for a large number of products which may not accurately reflect actual operation.
 Actual operating life of the product may be different from the MTTF. Read and write speed may vary
depending on the host device, read and write conditions and file size.

Images displayed of the N300, X300, S300, P300, V300 and L200 Internal Hard Drives as well as of the MG and AL Series are for illustration purposes only and do not show the actual products. The images are merely intended to help illustrate the function of the products.

SIE = Sanitize Instant Erase, SED = Self Encrypting Drives, FIPS = Federal Information Processing Standard

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 Other company names, product names, and service names mentioned herein may be trademarks of their respective registrants and/or owners as well.

#### Enterprise HDDs





**MG Series** 

Enterprise Capacity HDD

MG08SCA16TA			16,000			512		SIE/SED	
ENTERPRISE CAPACIT	Y HDD WI	TH SATA 6	GBIT/S INTERFA	CE – MAINSTREAM S	SERVER AND STORAG	GE, HYPERSCALE- AN	ND CLOUD STORAGE		
MG04ACA100N MG04ACA200N MG04ACA400N			1,000 2,000 4,000	512n	7,200	128	SATA 6 Gbit/s	SIE	
MG04ACA200E			2,000			128			
MG04ACA400E		Air	4,000			128			
MG04ACA600E			6,000			128			
MG06ACA600E			6,000			256			
MG05ACA800E			8,000	512e	7,200	128	SATA	SIE	
MG06ACA800E			8,000	5120	1,200	256	6 Gbit/s		
MG06ACA10TE			10,000			256			
MG07ACA12TE			12,000			256			
MG07ACA14TE	3.5"	Helium	14,000			256			
MG08ACA16TE			16,000			512		SIE/SED	
MG04ACA200A			2,000			128			
MG04ACA400A			4,000			128			
MG04ACA600A			6,000			128			
MG06ACA600A		Air	6,000			256			
MG05ACA800A			8,000	***	7.000	128	SATA	SIE	
MG06ACA800A			8,000	4Kn	7,200	256	6 Gbit/s		
MG06ACA10TA			10,000			256			
MG07ACA12TA			12,000			256			
MG07ACA14TA		Helium	14,000			256			
MG08ACA16TA			16,000			512		SIE/SED	

			Perform	ance				Reliabi	ity			
	Average		Seek Time	Data Rate (sustained)	Operating Power	MTTF	Unrecoverable	Duty	Warranty			
_	Latency (ms)	(ms) read	(ms) write	(MB/s)	(W) typ.	(hrs)	Error Rate	5,	(TB/year)	(years)		
	4.2	8.5	9.5	204	11.8	1.4 mill.	1 in 10 <sup>15</sup>	24/7	550	5		
				215	11.8	1.4 mill.						
		0.5	0.5	241	9.18							
	4.2	8.5	9.5	241	9.78		1 in 10 <sup>15</sup>	24/7 550	550	5		
				248	10.78	2.5 mill.						
				254	7.81	2.5 111111.						
				260	8.36							
		8.0	8.6	275	8.2							
				215	11.8	1.4 mill.						
				215	11.0	1.4 111111.				5		
				241	9.18							
	4.2	8.5	9.5	241	9.78		1 in 10 <sup>15</sup>	24/7	24/7 550			
				248	10.78							
				254	7.81	2.5 mill.						
				260	8.36							
		8.0	8.6	275	8.2							
	4.2	8.5	9.5	204	11.3	1.4 mill.	1 in 10 <sup>15</sup>	24/7	550	5		
	4.2	8.5	9.5		11.3	1.4 mill.	1 in 10 <sup>15</sup>	24/7	550	5		
	4.2	8.5	9.5	184			1 in 10 <sup>15</sup>	24/7	550	5		
	4.2	8.5	9.5	184 194	11.3	1.4 mill.	1 in 10 <sup>15</sup>	24/7	550	5		
	4.2	8.5	9.5	184 194 215	11.3	1.4 mill.	1 in 10 <sup>15</sup>	24/7	550	5		
				184 194 215 241	11.3 8.97	1.4 mill. 2.5 mill.						
	4.2	8.5 8.5	9.5	184 194 215 241 241	11.3 8.97 11.4	1.4 mill.	1 in 10 <sup>15</sup>	24/7	550 550	5		
				184 194 215 241	11.3 8.97	1.4 mill. 2.5 mill.						
				184 194 215 241 241	11.3 8.97 11.4 9.81 10.62	1.4 mill. 2.5 mill.						
				184 194 215 241 241 241 249	11.3 8.97 11.4 9.81	1.4 mill. 2.5 mill. 2.0 mill.						
				184 194 215 241 241 241 249 254 260	11.3 8.97 11.4 9.81 10.62	1.4 mill. 2.5 mill. 2.0 mill.						
		8.5	9.5	184 194 215 241 241 241 249 254 260 275 184	11.3 8.97 11.4 9.81 10.62 7.8 7.67	1.4 mill. 2.5 mill. 2.0 mill. 2.5 mill.						
		8.5	9.5	184 194 215 241 241 241 249 254 260 275 184	11.3 8.97 11.4 9.81 10.62 7.8	1.4 mill. 2.5 mill. 2.0 mill.						
		8.5	9.5	184 194 215 241 241 241 249 254 260 275 184 194	11.3 8.97 11.4 9.81 10.62 7.8 7.67	1.4 mill. 2.5 mill. 2.0 mill. 2.5 mill.						
	4.2	8.5	9.5	184 194 215 241 241 241 249 254 260 275 184 194 215 241	11.3 8.97 11.4 9.81 10.62 7.8 7.67 11.3	1.4 mill. 2.5 mill. 2.5 mill. 2.5 mill. 2.5 mill.						
		8.5	9.5	184 194 215 241 241 249 254 260 275 184 194 215 241	11.3 8.97 11.4 9.81 10.62 7.8 7.67 11.3 8.97 11.4	1.4 mill. 2.5 mill. 2.0 mill. 2.5 mill.						
	4.2	8.5	9.5	184 194 215 241 241 249 254 260 275 184 194 215 241 241	11.3  8.97  11.4  9.81  10.62  7.8  7.67  11.3  8.97  11.4  9.81	1.4 mill. 2.5 mill. 2.5 mill. 2.5 mill. 2.5 mill.	1 in 10 <sup>15</sup>	24/7	550	5		
	4.2	8.5	9.5	184 194 215 241 241 241 249 254 260 275 184 194 215 241 241 241 241	11.3 8.97 11.4 9.81 10.62 7.8 7.67 11.3 8.97 11.4	1.4 mill. 2.5 mill. 2.5 mill. 2.5 mill. 2.5 mill. 2.5 mill.	1 in 10 <sup>15</sup>	24/7	550	5		
	4.2	8.5	9.5	184 194 215 241 241 241 249 254 260 275 184 194 215 241 241 241 241 249	11.3  8.97  11.4  9.81  10.62  7.8  7.67  11.3  8.97  11.4  9.81	1.4 mill. 2.5 mill. 2.5 mill. 2.5 mill. 2.5 mill.	1 in 10 <sup>15</sup>	24/7	550	5		
	4.2	8.5	9.5	184 194 215 241 241 241 249 254 260 275 184 194 215 241 241 241 241	11.3  8.97  11.4  9.81  10.62  7.8  7.67  11.3  8.97  11.4  9.81  10.62	1.4 mill. 2.5 mill. 2.5 mill. 2.5 mill. 2.5 mill. 2.5 mill.	1 in 10 <sup>15</sup>	24/7	550	5		

### **TOSHIBA**

