TOSHIBA

External
and
Internal
Hard Drives

Write your story.
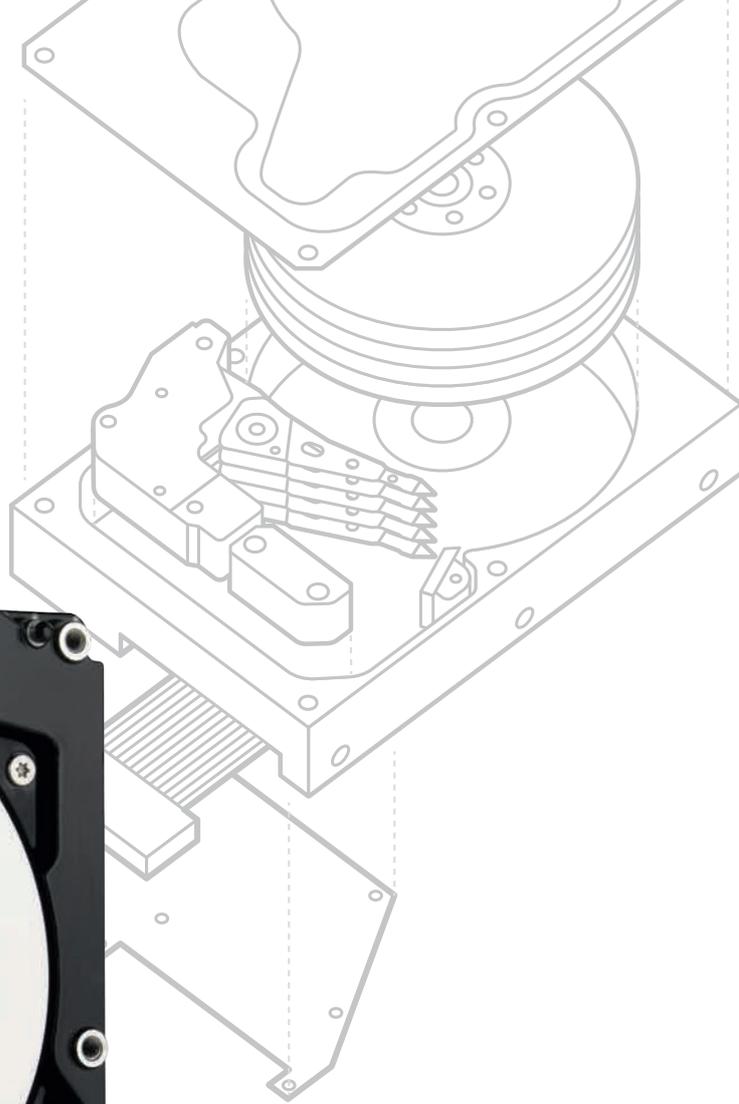
Content

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

TOSHIBA
ADVANCED ★★

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

TOSHIBA
STANDARD ★

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

Canvio Premium

A better class of storage

TOSHIBA
PREMIUM ★★★
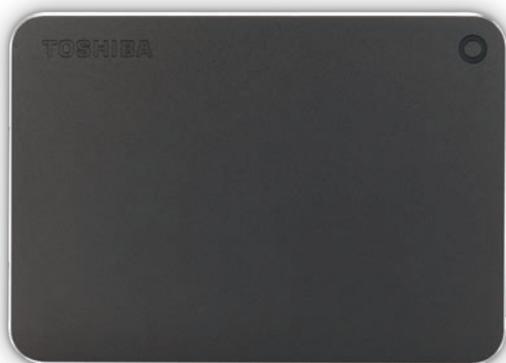
2.5″	2.5" External Hard Drive
	Aluminium finish
	SuperSpeed USB 3.0 port
	USB-powered
	Auto-backup software (for download)
	Password protection software (for download)
	Type-C adapter (Type-A to -C)
	Soft pouch included
	3-year warranty

Colours

Capacities

4	3	2	1
TB	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

TOSHIBA
PREMIUM ★★★

3.5″	3.5" External Hard Drive
	Stylish and versatile design
	SuperSpeed USB 3.0/2.0 port
	High Performance
	Security lock slot

Colour

Capacities

6	5	4
TB	TB	TB

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.

Canvio Advance

More terabytes, more colours

TOSHIBA
ADVANCED ★★

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	3	2	1
TB	TB	TB	TB

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

TOSHIBA
ADVANCED ★★

2.5″	2.5" External Hard Drive
ALU	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

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.

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 TB | 3* TB | 2 TB | 1 TB | 500 GB |

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.

*Product design of the 3 TB model differs from the one shown.

Canvio Ready

Easy storage at super speed

TOSHIBA STANDARD ★

- 2.5" 2.5" External Hard Drive
- SuperSpeed USB 3.0 port
- USB-powered
- Drag and drop use

Colour

●

Capacities

| 4 TB | 3 TB | 2 TB | 1 TB | 500 GB |

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.

Technical data

External HDDs

Model	Range	Casing	Part Number	Capacity	Interface	PC[1]	Backup Software	Password Lock	Additional Features
Canvio Premium ★★★									
	TOSHIBA PREMIUM ★★★	Aluminium	HDTW240ES3CA	4 TB	USB 3.0 USB 2.0	✔	✔	✔	Soft pouch, Type-C connector
			HDTW230ES3CA	3 TB					
			HDTW220ES3AA	2 TB					
			HDTW210ES3AA	1 TB					
	TOSHIBA PREMIUM ★★★	Aluminium	HDTW240EB3CA	4 TB	USB 3.0 USB 2.0	✔	✔	✔	Soft pouch, Type-C connector
			HDTW230EB3CA	3 TB					
			HDTW220EB3AA	2 TB					
			HDTW210EB3AA	1 TB					
Canvio for Desktop ★★★									
	TOSHIBA PREMIUM ★★★	Piano Gloss	HDWC360EK3JA	6 TB	USB 3.0 USB 2.0	✔	–	–	Security lock slot
			HDWC350EK3JA	5 TB					
			HDWC340EK3JA	4 TB					
Canvio Advance ★★									
	TOSHIBA ADVANCED ★★	Piano Gloss	HDTC940ER3CA	4 TB	USB 3.0 USB 2.0	✔	✔	✔	–
			HDTC930ER3CA	3 TB					
			HDTC920ER3AA	2 TB					
			HDTC910ER3AA	1 TB					
	TOSHIBA ADVANCED ★★	Piano Gloss	HDTC940EL3CA	4 TB	USB 3.0 USB 2.0	✔	✔	✔	–
			HDTC930EL3CA	3 TB					
			HDTC920EL3AA	2 TB					
			HDTC910EL3AA	1 TB					
	TOSHIBA ADVANCED ★★	Piano Gloss	HDTC940EW3CA	4 TB	USB 3.0 USB 2.0	✔	✔	✔	–
			HDTC930EW3CA	3 TB					
			HDTC920EW3AA	2 TB					
			HDTC910EW3AA	1 TB					
	TOSHIBA ADVANCED ★★	Piano Gloss	HDTC940EK3CA	4 TB	USB 3.0 USB 2.0	✔	✔	✔	–
			HDTC930EK3CA	3 TB					
			HDTC920EK3AA	2 TB					
			HDTC910EK3AA	1 TB					
Canvio Alu ★★									
	TOSHIBA ADVANCED ★★	Aluminium	HDTH320ER3AB	2 TB	USB 3.0 USB 2.0	✔	✔	✔	–
			HDTH310ER3AB	1 TB					
			HDTH305ER3AB	500 GB					
	TOSHIBA ADVANCED ★★	Aluminium	HDTH320EK3AB	2 TB	USB 3.0 USB 2.0	✔	✔	✔	–
			HDTH310EK3AB	1 TB					
			HDTH305EK3AB	500 GB					
	TOSHIBA ADVANCED ★★	Aluminium	HDTH320ES3AB	2 TB	USB 3.0 USB 2.0	✔	✔	✔	–
			HDTH310ES3AB	1 TB					
			HDTH305ES3AB	500 GB					
Canvio Basics ★									
	TOSHIBA STANDARD ★	Matt	HDTB440EK3CA	4 TB	USB 3.0 USB 2.0	✔	–	–	–
			HDTB330EK3CB	3 TB					
			HDTB420EK3AA	2 TB					
			HDTB410EK3AA	1 TB					
			HDTB405EK3AA	500 GB					
Canvio Ready ★									
	TOSHIBA STANDARD ★	Dot pattern	HDTP240EK3CA	4 TB	USB 3.0 USB 2.0	✔	–	–	–
			HDTP230EK3CA	3 TB					
			HDTP220EK3CA	2 TB					
			HDTP210EK3AA	1 TB					
			HDTP205EK3AA	500 GB					

[1] Requires reformatting for mac OS.

Internal Storage
Everything is possible – with the right tools.

NAS
Hard Drives

Offering special reliability for NAS and other high-performance 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.
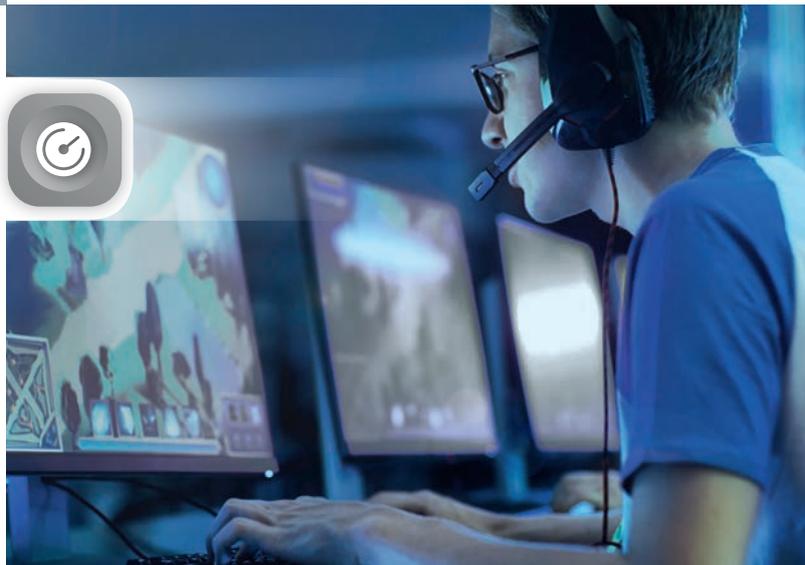
Surveillance Hard Drives

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 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 enterprise applications or to perform simultaneous transactions smoothly and efficiently.

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
	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-year warranty

Capacities

14 TB   **12** TB   **10** TB   **8** TB   **6** TB   **4** TB

Use for:
- NAS
- Desktop RAID
- Servers
- Multimedia 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 256 MB (10 – 14 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
	256 MB (14 | 12 | 10 TB) buffer 128 MB (8 | 6 | 5 | 4 TB) buffer
	Toshiba Stable Platter Technology
	Toshiba Dynamic Cache Technology

Capacities

14 TB   **12** TB   **10** TB   **8** TB

6 TB   **5** TB   **4** 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
	Up to 64 cameras
24/7	24/7 operation
3	3-year warranty

Capacities

10 TB **8** TB **6** TB **5** TB **4** 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, TV, 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
RPM	5,940 rpm (3 TB) 5,700 rpm (2 TB | 1 TB | 500 GB)
	64 MB buffer
	Silent Seek Technology
24/7	24/7 operation
	Temperature control

Capacities

3 TB **2** TB **1** TB **500** GB

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 TB **2** TB **1** TB **500** 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.
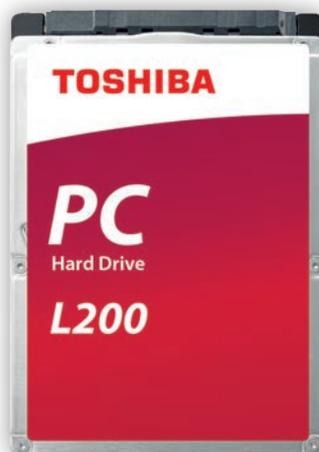
SATA	2.5" SATA Hard Drive
RPM	5,400 rpm
	128 MB (2 TB | 1 TB 7 mm) buffer 8 MB (1 TB 9.5 mm | 500 GB 7 mm | 500 GB 9.5 mm) buffer
	Toshiba Dynamic Cache Technology
	Advanced Format

Capacities

2 TB **1** TB **500** GB

Use for:
- Notebooks
- Game consoles
- External enclosures

Technical data

Internal HDDs

Model	Retail Number	Bulk Number	Capacity	Interface	RPM	Cache	Height	24/7 Operation	Warranty (years)
N300 NAS Hard Drive 3.5"									
	HDWG21EEZSTA	HDWG21EUZSVA	14 TB	SATA 6 Gbit/s	7,200	256 MB	26.1 mm	Supported	3
	HDWG21CEZSTA	HDWG21CUZSVA	12 TB			256 MB			
	HDWG11AEZSTA	HDWG11AUZSVA	10 TB			256 MB			
	HDWN180EZSTA	HDWN180UZSVA	8 TB			128 MB			
	HDWN160EZSTA	HDWN160UZSVA	6 TB			128 MB			
	HDWQ140EZSTA	HDWQ140UZSVA	4 TB			128 MB			
X300 Performance Hard Drive 3.5"									
	HDWR21EEZSTA	HDWR21EUZSVA	14 TB	SATA 6 Gbit/s	7,200	256 MB	26.1 mm	–	2
	HDWR21CEZSTA	HDWR21CUZSVA	12 TB			256 MB			
	HDWR11AEZSTA	HDWR11AUZSVA	10 TB			256 MB			
	HDWF180EZSTA	HDWF180UZSVA	8 TB			128 MB			
	HDWE160EZSTA	HDWF160UZSVA	6 TB			128 MB			
	HDWE150EZSTA	HDWE150UZSVA	5 TB			128 MB			
	HDWE140EZSTA	HDWE140UZSVA	4 TB			128 MB			
S300 Surveillance Hard Drive 3.5"									
	–	HDWT31AUZSVA	10 TB	SATA 6 Gbit/s	7,200	256 MB	26.1 mm	Supported	3
	–	HDWT380UZSVA	8 TB		7,200	256 MB			
	–	HDWT360UZSVA	6 TB		7,200	256 MB			
	–	HDWT150UZSVA	5 TB		5,400	128 MB			
	–	HDWT140UZSVA	4 TB		5,400	128 MB			
V300 Video Streaming Hard Drive 3.5"									
	–	HDWU130UZSVA	3 TB	SATA 6 Gbit/s	5,940	64 MB	26.1 mm	Supported	2
	–	HDWU120UZSVA	2 TB		5,700	64 MB			
	–	HDWU110UZSVA	1 TB		5,700	64 MB			
	–	HDWU105UZSVA	500 GB		5,700	64 MB			
P300 Desktop PC Hard Drive 3.5"									
	HDWD130EZSTA	HDWD130UZSVA	3 TB	SATA 6 Gbit/s	7,200	64 MB	26.1 mm	–	2
	HDWD120EZSTA	HDWD120UZSVA	2 TB			64 MB			
	HDWD110EZSTA	HDWD110UZSVA	1 TB			64 MB			
	HDWD105EZSTA	HDWD105UZSVA	500 GB			64 MB			
L200 Laptop PC Hard Drive 2.5"									
	HDWL120EZSTA	HDWL120UZSVA	2 TB	SATA 6 Gbit/s	5,400	128 MB	9.5 mm	–	2
	HDWL110EZSTA	HDWL110UZSVA	1 TB			128 MB	7.0 mm		
	–	HDWJ110UZSVA	1 TB	SATA 3 Gbit/s		8 MB	9.5 mm		
	–	HDWJ105UZSVA	500 GB			8 MB	9.5 mm		
	–	HDWK105UZSVA	500 GB	SATA 6 Gbit/s		8 MB	7.0 mm		

Enterprise Storage

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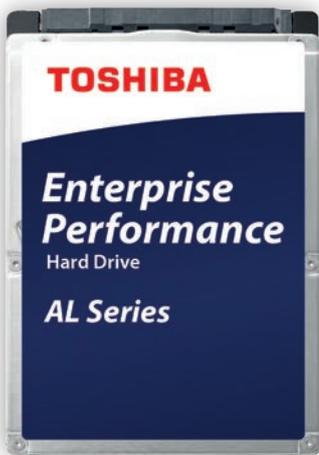
Use for:
Mission Critical Enterprise Server and Storage Systems | Business Database Server with High Workloads | Big Data Analytics | Virtualized Storage Systems

- 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 mill. hours	
Data transfer rate (MB/s)	304(4Kn, 512e), 273(512n)	236(512n, 300 GB), 273(4Kn, 512e), 245(512n)

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	MG04	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		
	SATA 6 Gbit/s				
RPM	7,200				
Cache	128 MB		256 MB		512 MB
Sector length	512e, 4Kn, 512n	512e, 4Kn			
MTTF	1.4 mill.	2.0 mill.	2.5 mill.		
Sealed	Air		Helium		

Technical data

Enterprise HDDs
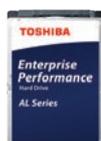
AL Series

Enterprise Performance HDD

Model Number	Specification								
	Form-factor	Fill Gas	Capacity (GB)	Block Size (Byte)	Spindle Speed (RPM)	Buffer Size (MiByte)	Interface	Security Options	
HIGHEST PERFORMANCE HDD (15K RPM) FOR SERVERS – BUSINESS DATABASE, ONLINE TRANSACTION, HIGH PERFORMANCE COMPUTING									
AL14SXB30EN			300						
AL14SXB60EN			600	512n	15,000	128	SAS 12 Gbit/s	SIE/SED	
AL14SXB90EN			900						
AL14SXB30EE			300						
AL14SXB60EE	2.5"	Air	600	512e	15,000	128	SAS 12 Gbit/s	SIE/SED	
AL14SXB90EE			900						
AL14SXB30EA			300						
AL14SXB60EA			600	4Kn	15,000	128	SAS 12 Gbit/s	SIE/SED	
AL14SXB90EA			900						
PERFORMANCE HDD (10K RPM) FOR SERVERS AND STORAGE – MISSION CRITICAL BUSINESS DATABASE AND HIGH PERFORMANCE STORAGES									
AL15SEB030N			300						
AL15SEB060N			600	512n	10,500	128	SAS 12 Gbit/s	SIE/SED	
AL15SEB090N			900						
AL15SEB120N			1,200						
AL15SEB06EQ			600						
AL15SEB09EQ			900						
AL15SEB12EQ	2.5"	Air	1,200	512e	10,500	128	SAS 12 Gbit/s	SIE/SED	
AL15SEB18EQ			1,800						
AL15SEB24EQ			2,400						
AL15SEB06EP			600						
AL15SEB09EP			900						
AL15SEB12EP			1,200	4Kn	10,500	128	SAS 12 Gbit/s	SIE/SED	
AL15SEB18EP			1,800						
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^{30} bytes = 1,073,741,824 bytes and 1TB = 2^{40} = 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^{20}, or 1,048,576 bytes.
- „2.5-inch" and „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.

Performance					Reliability				
Average Latency (ms)	Average Seek Time		Data Rate (sustained) (MB/s)	Operating Power (W) typ.	MTTF (hrs)	Unrecoverable Error Rate	Duty	Rated Workload (TB/year)	Warranty (years)
	(ms) read	(ms) write							
2.0	2.95	3.25	273	9.0	2.0 mill.	1 in 10^{16}	24/7	unlimited	5
2.0	2.95	3.25	304	9.0	2.0 mill.	1 in 10^{16}	24/7	unlimited	5
2.0	2.95	3.25	304	9.0	2.0 mill.	1 in 10^{16}	24/7	unlimited	5
2.86	4.2	4.6	236 / 245	6.5 / 7.0 / 7.0 / 8.1	2.0 mill.	1 in 10^{16}	24/7	unlimited	5
2.86	4.2	4.6	273	6.5 / 7.0 / 7.0 / 8.1 / 8.7	2.0 mill.	1 in 10^{16}	24/7	unlimited	5
2.86	4.2	4.6	273	6.5 / 7.0 / 7.0 / 8.1 / 8.7	2.0 mill.	1 in 10^{16}	24/7	unlimited	5

- A = Advanced Format Sector (4k), E = 512byte Sector Emulated, N = 512byte Sector Native, P = 4Kn Q=512e
- 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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Technical data

Enterprise HDDs

MG Series

Enterprise Capacity HDD

Model Number	Specification								
	Form-factor	Fill Gas	Capacity (GB)	Block Size (Byte)	Spindle Speed (RPM)	Buffer Size (MiByte)	Interface	Security Options	
ENTERPRISE CAPACITY HDD WITH SAS 12 GBIT/S INTERFACE – BUSINESS CRITICAL STORAGES WITH LARGE CAPACITY									
MG04SCA20EN	3.5"	Air	2,000	512n	7,200	128	SAS 12 Gbit/s	SIE	
MG04SCA40EN			4,000					SIE	
MG04SCA20EE		Air	2,000	512e	7,200	128	SAS 12 Gbit/s	SIE	
MG04SCA40EE			4,000					SIE/SED	
MG04SCA60EE			6,000					SIE/SED	
MG06SCA600E			6,000			256		SIE	
MG06SCA800E			8,000					SIE/SED	
MG06SCA10TE			10,000					SIE/SED	
MG07SCA12TE		Helium	12,000					SIE/SED	
MG07SCA14TE			14,000					SIE/SED	
MG08SCA16TE			16,000			512		tba	
MG04SCA20EA		Air	2,000	4Kn	7,200	128	SAS 12 Gbit/s	SIE	
MG04SCA40EA			4,000					SIE/SED	
MG04SCA60EA			6,000					SIE/SED	
MG06SCA600A			6,000			256		SIE	
MG06SCA800A			8,000					SIE/SED	
MG06SCA10TA			10,000					SIE/SED	
MG07SCA12TA		Helium	12,000					SIE/SED	
MG07SCA14TA			14,000					SIE/SED	
MG08SCA16TA			16,000			512		tba	
ENTERPRISE CAPACITY HDD WITH SATA 6 GBIT/S INTERFACE – MAINSTREAM SERVER AND STORAGE, HYPERSCALE- AND CLOUD STORAGE									
MG04ACA100N	3.5"	Air	1,000	512n	7,200	128	SATA 6 Gbit/s	SIE	
MG04ACA200N			2,000						
MG04ACA400N			4,000						
MG04ACA200E		Air	2,000	512e	7,200	128	SATA 6 Gbit/s	SIE	
MG04ACA400E			4,000			128			
MG04ACA600E			6,000			128			
MG06ACA600E			6,000			256			
MG05ACA800E			8,000			128			
MG06ACA800E			8,000			256			
MG06ACA10TE			10,000			256			
MG07ACA12TE		Helium	12,000			256			
MG07ACA14TE			14,000			256			
MG08ACA16TE			16,000			512		tba	
MG04ACA200A		Air	2,000	4Kn	7,200	128	SATA 6 Gbit/s	SIE	
MG04ACA400A			4,000			128			
MG04ACA600A			6,000			128			
MG06ACA600A			6,000			256			
MG05ACA800A			8,000			128			
MG06ACA800A			8,000			256			
MG06ACA10TA			10,000			256			
MG07ACA12TA		Helium	12,000			256			
MG07ACA14TA			14,000			256			
MG08ACA16TA			16,000			512		tba	

	Performance				Reliability				
Average Latency (ms)	Average Seek Time (ms) read	(ms) write	Data Rate (sustained) (MB/s)	Operating Power (W) typ.	MTTF (hrs)	Unrecoverable Error Rate	Duty	Rated Workload (TB/year)	Warranty (years)
4.2	8.5	9.5	204	11.8	1.4 mill.	1 in 10^{15}	24/7	550	5
4.2	8.5	9.5	215	11.8	1.4 mill.	1 in 10^{15}	24/7	550	5
			241	9.18	2.5 mill.				
			241	9.78					
			248	10.78					
			254	7.81					
			260	8.36					
tba	tba	tba	tba	tba		tba			
4.2	8.5	9.5	215	11.8	1.4 mill.	1 in 10^{15}	24/7	550	5
			241	9.18	2.5 mill.				
			241	9.78					
			248	10.78					
			254	7.81					
			260	8.36					
tba	tba	tba	tba	tba		tba			
4.2	8.5	9.5	204	11.3	1.4 mill.	1 in 10^{15}	24/7	550	5
4.2	8.5	9.5	184	11.3	1.4 mill.	1 in 10^{15}	24/7	550	5
			194						
			215						
			241	8.97	2.5 mill.				
			241	11.4	2.0 mill.				
			241	9.81	2.5 mill.				
			249	10.62					
			254	7.8					
			260						
tba	tba	tba	tba	tba		tba			
4.2	8.5	9.5	184	11.3	1.4 mill.	1 in 10^{15}	24/7	550	5
			194						
			215						
			241	8.97	2.5 mill.				
			241	11.4	2.0 mill.				
			241	9.81					
			249	10.62					
			254	7.8	2.5 mill.				
			260						
tba	tba	tba	tba	tba		tba			

TOSHIBA