TOSHIBA

STORAGE SOLUTIONS
HARD DISK DRIVES
FOR PROFESSIONAL &
PERSONAL USE
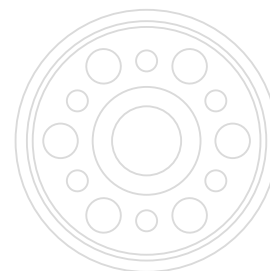
Hard Drive
**Enterprise
Capacity**

MG Series

toshiba-storage.com

Contents

The right hard disk drive for every mission

No storage requirement is the same. On our journeys, we generate an increased amount of data, day in, day out.

Be it for private or professional use, server-based storage, video surveillance, gaming or stylish mobile solutions, Toshiba delivers the right hard disk drives for a variety of storage needs.

Toshiba's external storage product range is categorized into different classes - Standard, Advanced, Premium and Specialty - addressing the individual storage requirements of users and helping them to find the perfect fit for their storage needs, whether it's a solution for simple plug-and-play operation, gaming or cross-platform use for Mac, Windows PC and tablets.

Toshiba's internal HDDs are divided into application areas for private and professional use, including NAS, surveillance and high-performance drives. Additionally, the extensive line-up of Enterprise storage solutions meet highest requirements to support business- and mission-critical applications.

For over 50 years Toshiba has been developing and delivering high-quality hard disk drives to the market. View the current portfolio on the following pages and find your perfect storage solution.

Everything is possible – with the right partner and hard disk drive.

Portable Storage

Storage is one of the most vital components of our ever-expanding digital lifestyles. In order to suit 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 will find the right solution.

Our external storage product line-up is categorized according to performance criteria and features. With clear colour codings and shopping guides, customers immediately know which products best meet their requirements.
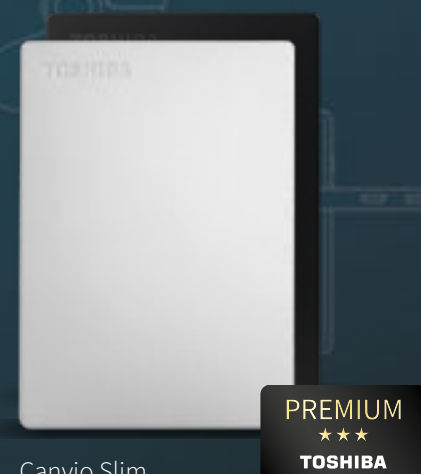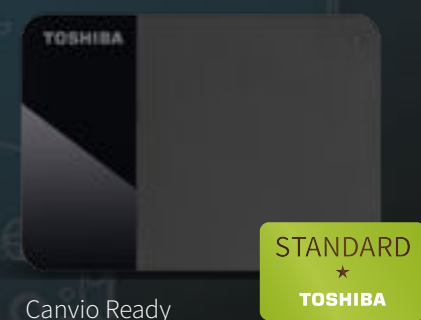
▶ Watch video

Canvio Gaming

SPECIALTY
◆
TOSHIBA

Canvio Flex

SPECIALTY
◆
TOSHIBA

Canvio Slim

PREMIUM
★ ★ ★
TOSHIBA

Canvio Advance

ADVANCED
★ ★
TOSHIBA

Canvio Ready

STANDARD
★
TOSHIBA

Canvio Basics

STANDARD
★
TOSHIBA

Specialty

SPECIALTY
◆
TOSHIBA

Hard drives with something special built in.
There are times when ordinary drives are not good enough for special storage needs. Whether it's a high-performance storage upgrade for your gaming console or a drive that is compatible with your growing stable of devices, you can be sure to find the right solution in the Canvio Gaming or the Canvio Flex. Everything is possible – with the right drive.

Premium

PREMIUM
★ ★ ★
TOSHIBA

Make no compromises – every device should fit your style and exceed your expectations.
In the world of design, special details make the difference. That's what makes the Canvio Slim our top line of hard drives. Premium reliability and performance are packed into a slim aluminium casing that looks great. And there are extras you won't find on most hard drives, like software for added protection and a 3-year extended warranty. Everything is possible – with the right drive.

Advanced

ADVANCED
★ ★
TOSHIBA

When your journey leads you to stunning places, you need a safe place to store all the impressions.
Life is full of adventure. Every day there are memories to save and new experiences to report on. The Canvio Advance line of hard drives are your perfect companions. You get high-performance, top-quality and advanced functions in a modern design. And since security and backup software are included, you can rest assured your data is always safe. Everything is possible – with the right drive.
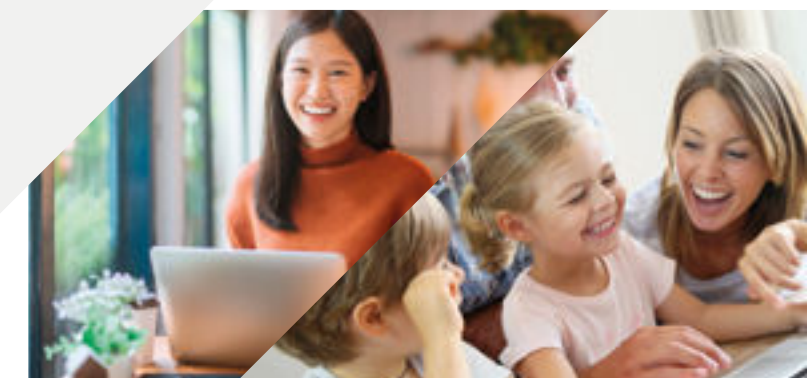
Standard

STANDARD
★
TOSHIBA

Save your special memories on a special hard drive.
Life flies by quickly. Before you know it, the kids are grown up and memories of the great times start to fade. Make your Toshiba Canvio Basics or Canvio Ready the treasure chest for all the special moments. It's easy to keep your memories safe and revisit them in clear detail later. Everything is possible – with the right drive.

Canvio Flex
Smart Storage. Made to Adapt.
For Mac, Windows PC and Tablets.

CHIP excellent
test
January 2021
Toshiba Canvio Flex
Unabhängige Tests seit 1978
chip.de/CD161017

SPECIALTY
TOSHIBA

One Drive. Many Devices.
The Canvio Flex offers storage in its most compatible form, enabling you to seamlessly store and access your data on Mac, Windows PC and tablet devices with USB-C® ports* with a simple one-stop solution.

2.5″ 2.5″ External Hard Drive
Elegant silver finish
SuperSpeed USB 3.2 Gen 1 port
USB-powered
Includes USB Type-C® and USB Type-A cables
Compatible with Mac / Windows PC / Tablet
3-year warranty

Colour

Capacities
4 TB   2 TB   1 TB

* Please check device compatibility

View more

Canvio Gaming
Level up your Storage.

CHIP excellent
test
January 2021
Toshiba Canvio Gaming
Unabhängige Tests seit 1978
chip.de/CD161016

SPECIALTY
TOSHIBA

More Games. More Wins.
With the Canvio Gaming portable hard drive, you won't have to worry about deleting games to make room for the hottest new release. The sleek, lightweight design allows you to hold up to 100 games** in an easy to carry light-weight casing. Offering up to 4 TB of storage capacity for your data, your gaming library has room to grow.

2.5″ 2.5″ External Hard Drive
Sleek black finish
SuperSpeed USB 3.2 Gen 1 port
USB-powered
Works with PlayStation / Xbox / PC
Store up to 25+ games per TB**

Colour

Capacities
4 TB   2 TB   1 TB

** Average game size: 36 GB

View more

Canvio Slim
All of the Room. None of the Weight.

PREMIUM ★★★
TOSHIBA

Stylish and elegant companion.
Up to 2 TB stored in a super slim and lightweight alumi-nium design, make this drive a stylish and elegant com-panion for any device, whether it is on your desk or on the move. With several useful features and a three-year product warranty, the Canvio Slim keeps your data well protected. Available in two different colours: silver or black, the Canvio Slim always suits the occasion.
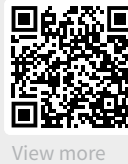
2.5″ 2.5″ External Hard Drive
Aluminium finish
SuperSpeed USB 3.2 Gen 1 port
USB-powered
Auto-backup software
Password protection software
3-year warranty

Colours

Capacities
2 TB   1 TB

View more

Canvio Advance
Secured in Style. Take Life Anywhere.

ADVANCED ★★
TOSHIBA

Modern design.
The Canvio Advance features a stylish, textured design in four trendy colours. You can choose from black, light beige, red and green based on your preference for up to 4 TB of mobile storage in the plam of your hand.

2.5″ 2.5″ External Hard Drive
Textured finish
SuperSpeed USB 3.2 Gen 1 port
USB-powered
Auto-backup software
Password protection software

Colours

Capacities
4 TB   2 TB   1 TB

View more

Canvio Basics

Storage Made Simple.

STANDARD
★
TOSHIBA

Your compact companion.
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.

2.5″ 2.5″ External Hard Drive

Matt finish

SuperSpeed USB 3.2 Gen 1 port

USB-powered

Plug-and-play operation

Colour

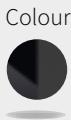Capacities

4 TB 2 TB 1 TB

8

Canvio Ready

Ready to Store. Simple to Use.

STANDARD
★
TOSHIBA

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 in its distinctive two-tone matte and gloss black finish.

2.5″ 2.5″ External Hard Drive

Two-tone matte and gloss finish

SuperSpeed USB 3.2 Gen 1 port

USB-powered

Drag-and-drop use

Colour

Capacities

4 TB 2 TB 1 TB

Technical data

Model	Category	Casing	Part Number	Capacity	Interface	USB Connector Type	PC	Mac	Other Compatibility	Backup Software	Password Protection
Canvio Flex											
	SPECIALTY TOSHIBA	Elegant silver finish	HDTX140ESCCA	4 TB	USB 3.2 Gen 1	Type-C® & Type-A	✔	✔	iOS / Android™ devices[2]	–	–
			HDTX120ESCAA	2 TB							
			HDTX110ESCAA	1 TB							
Canvio Gaming											
	SPECIALTY TOSHIBA	Sleek black finish	HDTX140EK3CA	4 TB	USB 3.2 Gen 1	Type-A	✔	✔	PlayStation / Xbox[2]	–	–
			HDTX120EK3AA	2 TB							
			HDTX110EK3AA	1 TB							
Canvio Slim ★★★											
	PREMIUM ★★★ TOSHIBA	Aluminium finish	HDTD320EK3EA	2 TB	USB 3.2 Gen 1	Type-A	✔	✔[1]	–	✔	✔
			HDTD310EK3DA	1 TB							
			HDTD320ES3EA	2 TB							
			HDTD310ES3DA	1 TB							
Canvio Advance ★★											
	ADVANCED ★★ TOSHIBA	Textured finish	HDTCA40EK3CA	4 TB	USB 3.2 Gen 1	Type-A	✔	✔[1]	–	✔	✔
			HDTCA20EK3AA	2 TB							
			HDTCA10EK3AA	1 TB							
		Textured finish	HDTCA40ER3CA	4 TB							
			HDTCA20ER3AA	2 TB							
			HDTCA10ER3AA	1 TB							
		Textured finish	HDTCA40EW3CA	4 TB							
			HDTCA20EW3AA	2 TB							
			HDTCA10EW3AA	1 TB							
		Textured finish	HDTCA40EG3CA	4 TB							
			HDTCA20EG3AA	2 TB							
			HDTCA10EG3AA	1 TB							
Canvio Basics ★											
	STANDARD ★ TOSHIBA	Matt	HDTB540EK3CA	4 TB	USB 3.2 Gen 1	Type-A	✔	✔[1]	–	–	–
			HDTB520EK3AA	2 TB							
			HDTB510EK3AA	1 TB							
Canvio Ready ★											
	STANDARD ★ TOSHIBA	Two-toned matte and gloss finish	HDTP340EK3CA	4 TB	USB 3.2 Gen 1	Type-A	✔	✔[1]	–	–	–
			HDTP320EK3AA	2 TB							
			HDTP310EK3AA	1 TB							

[1] Requires reformatting for macOS.
[2] Please check compatibility list.

Built for performance and reliability

Toshiba is renowned the world over for 50 years of leading innovation – and the power behind its hard drive solutions is no exception. Our enterprise-level developments meet the industry standards with proven reliability. Designed for high capacity and excellent performance, you can be sure that Toshiba's wealth of experience in hard drives is at work in your storage system.

Quality in every detail

Best materials, highly rated hard drive disks and fast controllers: That is what Toshiba external storage is made of.

Micro-B USB 3.2 Gen 1
HDD interface connector

Advanced HDD Technology – FC-MAMR
Toshiba's high capacity HDDs feature Flux Control Microwave Assisted Magnetic Recording (FC-MAMR) Technology – a breakthrough technology that uses microwave energy to ensure more of the write energy is focused into the platter, achieving an increased areal density capability (ADC) of up to 20 %.

Laser sealed helium
The Toshiba HDDs with 12 TB or more use a helium-sealed design, providing the power-efficient capacity and storage density needed by cloud-scale and enterprise storage solution providers to achieve their TCO objectives. Toshiba's laser welding technology ensures that the helium remains securely sealed inside the drive enclosure.

Hard Drives
Toshiba quality 2.5" hard drive disks with up to 4 TB capacity

Controller
Fast USB 3.2 onboard controller as part of the HDDs circuit board layout

High Reliability
Providing reliability for the ultimate peace of mind, Toshiba HDDs deliver up to 2.5M hours of MTTF, achieving an AFR (Annualized Failure Rate) in 24/7 operation of down to 0.35 % - at a rated workload as high as 550 TB/year.

Software

Password Protection
Stop unauthorised users from accessing your private information with the included Toshiba Storage Security Software, allowing you to secure your hard drive with a unique password.

Backup Software
The included Toshiba Storage Backup Software comes with an intuitive and user-friendly interface, making the backup of your data a breeze. Simply choose your individual files or folders, intervals and time settings for your backups and let the software take care of the rest.

USB Type-C® – Future-proof solution

Be prepared for connectivity of the future.
Most modern devices nowadays come with an USB-C® interface. That's why some of our hard drives include an USB-C® cable, so there's no need to buy an additional adapter. Ready to plug in to future devices out of the box.

Industry-leading 10 disk platter design
The Toshiba 20 TB HDD features a 10-disk platter design – achieving high storage density levels by stacking the maximum numbers of platters in the industry-leading 3.5" form factor.

Internal Hard Disk Drives

Toshiba offers a broad range of internal hard drives to keep pace with the ever-growing specific requirements of data storage. Choose from a wide range of reliable hard drives that deliver innovative technology and best performance and are tailored to your storage needs. Targeting different application areas such as NAS, Surveillance, Gaming, PC, laptop, and Enterprise storage, Toshiba provides the highest standards to support your personal and business missions.

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.

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.
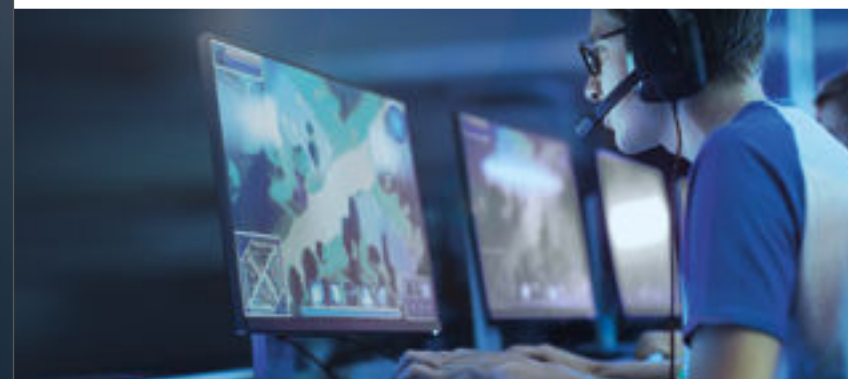
Performance Hard Drives

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.

PC Hard Drives

Boost the storage capacity of your laptop, PC, or game 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.

Everything is possible – with the right drive.

N300

Built for 24/7 reliability

View more

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 buffer (18 | 16 | 14 TB) 256 MB buffer (14 | 12 | 10 | 8 | 6 | 4 TB)
	Toshiba Stable Platter Technology
	High reliability and enhanced real-time performance
	High-endurance design
	3-year warranty

Capacities

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

View more

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 (18 TB, 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 buffer (18 | 16 | 14 TB) 256 MB buffer (12 | 10 | 8 | 6 | 4 TB)
	Toshiba Stable Platter Technology
	Toshiba Dynamic Cache Technology

Capacities

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

Use for:
- Powerful Desktop Workstations
- All-in-one PCs
- Gaming computers
- Home Media computers

S300 Pro

Capture every detail

View more

Toshiba's S300 Pro

The 3.5-inch internal hard disk is designed and tested for 24/7 reliable surveillance, built for speed, capacity, and longer content retention. Capture and analyse every frame from up to 64 video cameras in high resolution with the S300 Pro. Space is important to continually capture a history of video evidence over a period of time. With up to 10 TB, you get the capacity to record and play back the events in real-time in high resolution and with object identification and face recognition.

SATA	3.5" SATA Hard Drive
RPM	7,200 rpm
	256 MB buffer
	Up to 64 cameras
24/7	24/7 operation
	3-year warranty

Capacities

10 TB	8 TB	6 TB

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

S300

Always On, Always Watching

View more

Toshiba's S300

With surveillance systems, nothing but the best is good enough. The Toshiba 3.5-inch S300 is built to meet the highest demands. With support for up to 64 high-resolution surveillance video cameras simultaneiously and up to 6 TB capacity, it brings everything into clear view. Each S300 is built with the highest-quality components and has passed rigorous tests to ensure 24/7 reliability and performance. That's Toshiba quality you can trust under the harshest working conditions.

SATA	3.5" SATA Hard Drive
RPM	5,400 rpm (6 | 4 | 2 TB) 5,700 rpm (1 TB)
	256 MB buffer (6 | 4 TB) 128 MB buffer (4 | 2 TB) 64 MB buffer (1 TB)
	Up to 64 cameras
24/7	24/7 operation
	3-year warranty

Capacities

6 TB	4 TB	2 TB	1 TB

Use for:
- Surveillance Digital Video Recorders (sDVR)
- Surveillance Network Video Recorders (sNVR)
- Hybrid sDVR (analog and IP)

P300

Performance meets reliability

View more

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 5,400 rpm (6 | 4 TB)
7,200 rpm (3 | 2 | 1 TB)

256 MB buffer (2 TB)
128 MB buffer (6 | 4 TB)
64 MB buffer (3 | 1 TB)

Capacities

6 TB   4 TB   3 TB   2 TB   1 TB

Use for:
• Powerful Desktop Workstations
• All-in-one PCs
• Desktop PCs
• External enclosures
• Gaming computers

L200

Take your laptop to the next level

View more

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

Toshiba Dynamic Cache Technology

Capacities

2 TB   1 TB   500 GB

Use for:
• Notebooks
• Game consoles
• External enclosures

Technical data

Model	Retail Number	Bulk Number	Capacity	Interface	RPM	Cache	Height	Recording Technology	RAID	24/7 Operation	Warranty (years)
N300 NAS Hard Drive 3.5"											
	–	HDWG51JUZSVA	18 TB			512 MB					
	–	HDWG31GUZSVA	16 TB			512 MB					
	HDWG31EEZSTA	HDWG31EUZSVA	14 TB			512 MB					
	–	HDWG21EUZSVA	14 TB			256 MB					
	HDWG21CEZSTA	HDWG21CUZSVA	12 TB	SATA 6 Gbit/s	7,200	256 MB	26.1 mm	CMR	✔	✔	3
	HDWG11AEZSTA	HDWG11AUZSVA	10 TB			256 MB					
	HDWG480EZSTA	HDWG480UZSVA	8 TB			256 MB					
	HDWG460EZSTA	HDWG460UZSVA	6 TB			256 MB					
	HDWG440EZSTA	HDWG440UZSVA	4 TB			256 MB					
X300 Performance Hard Drive 3.5"											
	–	HDWR51JUZSVA	18 TB			512 MB					
	–	HDWR31GUZSVA	16 TB			512 MB					
	HDWR31EEZSTA	HDWR31EUZSVA	14 TB			512 MB					
	HDWR21CEZSTA	HDWR21CUZSVA	12 TB	SATA 6 Gbit/s	7,200	256 MB	26.1 mm	CMR	–	–	2
	HDWR11AEZSTA	HDWR11AUZSVA	10 TB			256 MB					
	HDWR480EZSTA	HDWR480UZSVA	8 TB			256 MB					
	HDWR460EZSTA	HDWR460UZSVA	6 TB			256 MB					
	HDWR440EZSTA	HDWR440UZSVA	4 TB			256 MB					
S300 Pro Surveillance Hard Drive 3.5"											
	–	HDWT31AUZSVA	10 TB			256 MB					
	–	HDWT380UZSVA	8 TB	SATA 6 Gbit/s	7,200	256 MB	26.1 mm	CMR	✔	✔	3
	–	HDWT360UZSVA	6 TB			256 MB					
S300 Surveillance Hard Drive 3.5"											
	–	HDWT860UZSVA	6 TB		5,400	256 MB		SMR	–		
	–	HDWT840UZSVA	4 TB		5,400	256 MB					
	–	HDWT140UZSVA	4 TB	SATA 6 Gbit/s	5,400	128 MB	26.1 mm	CMR	✔	✔	3
	–	HDWT720UZSVA	2 TB		5,400	128 MB		SMR	–		
	–	HDWV110UZSVA	1 TB		5,700	64 MB		CMR			
P300 Desktop PC Hard Drive 3.5"											
	HDWD260EZSTA	HDWD260UZSVA	6TB		5,400	128 MB		SMR			
	HDWD240EZSTA	HDWD240UZSVA	4TB		5,400	128 MB					
	HDWD130EZSTA	HDWD130UZSVA	3TB	SATA 6 Gbit/s	7,200	64 MB	26.1 mm	CMR	–	–	2
	HDWD320EZSTA	HDWD320UZSVA	2TB		7,200	256 MB		SMR			
	HDWD110EZSTA	HDWD110UZSVA	1TB		7,200	64 MB					
L200 Laptop PC Hard Drive 2.5"											
	–	HDWL120UZSVA	2 TB	SATA 6 Gbit/s		128 MB	9.5 mm	SMR			
	–	HDWL110UZSVA	1 TB	SATA 6 Gbit/s		128 MB	7.0 mm				
	–	HDWJ110UZSVA	1 TB	SATA 3 Gbit/s	5,400	8 MB	9.5 mm		–	–	2
	–	HDWJ105UZSVA	500 GB	SATA 3 Gbit/s		8 MB	9.5 mm	CMR			
	–	HDWK105UZSVA	500 GB	SATA 6 Gbit/s		8 MB	7.0 mm				

AL Series
Enterprise Performance HDD
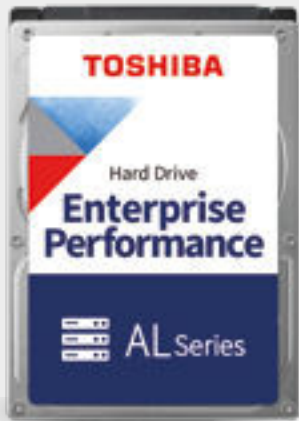
Toshiba's AL Series
Toshiba's Enterprise Performance Hard Drive – AL Series delivers high storage densities with rapid data transfer speed, backed up by a 5-year warranty. You can trust the AL Series to deliver day in and day out, 24/7, even in the most demanding high-performance server and storage systems. Especially when traffic is high, the hard drives have the speed needed to perform simultaneous transactions smoothly and efficiently. Additionally, proprietary aprovide the assurance that your data will stay in safe hands.

SAS   2.5" SAS Hard Drive

24/7   24/7 operation

        Unlimited workload (TB/year)

MTTF   MTTF of 2 mill. hours

        Persistent Write Cache technology

512n/4k   Flexibility in block size and SIE and SED options

        5-year warranty

View more

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

AL Series	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. hrs.	

MG Series
Enterprise Capacity HDD

Toshiba's MG Series
Toshiba's Enterprise Capacity Hard Drive – MG Series offers formatted capacities as high as 18 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.

SATA/SAS   3.5" SATA or SAS Hard Drive

24/7   24/7 operation

        Toshiba Stable Platter Technology

        Persistent Write Cache technology

550   550 TB/year workload

512n/4k   Flexibility in block size and SIE and SED options

        5-year warranty

View more

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

MG Series	MG04	MG06	MG07	MG08	MG09	MG10
Capacity (TB)	1	2 | 4	6 | 8 | 10	12 | 14	4	6 | 8	16	16 | 18	20
I/F speed	-	SAS 12 Gbit/s					
	SATA 6 Gbit/s						
RPM	7,200						
Cache	128 MB		256 MB			512 MB	
Sector length	512n	512e, 4Kn, 512n	512e, 4Kn		512e, 512n	512e, 4Kn	
MTTF	1.4 mill. Hrs.		2.5 mill. Hrs.		2 mill. Hrs.	2.5 mill. Hrs.	
Sealed	Air		Helium		Air	Helium	

Technical data

AL Series

Enterprise Performance HDD

Model Number	Form-factor	Fill Gas & Recording	Capacity (GB)	Block Size (Byte)	Spindle Speed (RPM)	Buffer Size (MiByte)	Interface	Security Options		Data Rate (sustained) (MB/s)	Operating Power (W) typ.	MTTF (hrs)	Unrecoverable Error Rate	Duty	Rated Workload (TB/year)	Warranty (years)
								Specification				**Performance**		**Reliability**		
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		272	9.0	2.0 mill.	1 in 10^{16}	24/7	unlimited	5
AL14SXB90EN			900													
AL14SXB30EE			300													
AL14SXB60EE	2.5"	Air CMR	600	512e	15,000	128	SAS 12 Gbit/s	SIE/SED		304	9.0	2.0 mill.	1 in 10^{16}	24/7	unlimited	5
AL14SXB90EE			900													
AL14SXB30EA			300													
AL14SXB60EA			600	4Kn	15,000	128	SAS 12 Gbit/s	SIE/SED		304	9.0	2.0 mill.	1 in 10^{16}	24/7	unlimited	5
AL14SXB90EA			900													
PERFORMANCE HDD (10K RPM) FOR SERVERS AND STORAGE – MISSION CRITICAL BUSINESS DATABASE AND HIGH PERFORMANCE STORAGES																
AL15SEB030N			300							236	6.5					
AL15SEB060N			600	512n	10,500	128	SAS 12 Gbit/s	SIE/SED			7.0	2.0 mill.	1 in 10^{16}	24/7	unlimited	5
AL15SEB090N			900							245	7.0					
AL15SEB120N			1,200								8.1					
AL15SEB06EQ			600								6.5					
AL15SEB09EQ			900								7.0					
AL15SEB12EQ	2.5"	Air CMR	1,200	512e	10,500	128	SAS 12 Gbit/s	SIE/SED		273	7.0	2.0 mill.	1 in 10^{16}	24/7	unlimited	5
AL15SEB18EQ			1,800								8.1					
AL15SEB24EQ			2,400								8.7					
AL15SEB06EP			600								6.5					
AL15SEB09EP			900								7.0					
AL15SEB12EP			1,200	4Kn	10,500	128	SAS 12 Gbit/s	SIE/SED		273	7.0	2.0 mill.	1 in 10^{16}	24/7	unlimited	5
AL15SEB18EP			1,800								8.1					
AL15SEB24EP			2,400								8.7					

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.

- 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 Pro, S300, P300 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
- Company names, product names, and service names mentioned herein may be trademarks of their respective registrants and/or owners as well.

Technical data

MG Series

Enterprise Capacity HDD

Model Number	Form-factor	Fill Gas & Recording	Capacity (GB)	Block Size (Byte)	Spindle Speed (RPM)	Buffer Size (MiByte)	Interface	Security Options	Data Rate (sustained) (MB/s)	Operating Power (W) typ.	MTTF (hrs)	Unrecoverable Error Rate	Duty	Rated Workload (TB/year)	Warranty (years)
ENTERPRISE CAPACITY HDD WITH SAS 12 GBIT/S INTERFACE – BUSINESS CRITICAL STORAGES WITH LARGE CAPACITY															
MG04SCA20EN	3.5"	Air CMR	2,000	512n	7,200	128	SAS 12 Gbit/s	SIE	204	11.8	1.4 mill.	1 in 10^{15}	24/7	550	5
MG04SCA40EN			4,000			128		SIE	204	11.8					
MG08SDA400N			4,000			256		SIE/SED	233	8.5	2.0 mill.				
MG04SCA20EE		Air CMR	2,000	512e	7,200	128	SAS 12 Gbit/s	SIE	215	11.8	1.4 mill.	1 in 10^{15}	24/7	550	5
MG04SCA40EE			4,000			128		SIE/SED	215	11.8					
MG08SDA400E			4,000			256		SIE/SED	255	8.5	2.0 mill.				
MG06SCA600E			6,000					SIE	241	9.5	2.5 mill.				
MG08SDA600E			6,000					SIE/SED	251	9.2	2.0 mill.				
MG06SCA800E			8,000					SIE/SED	249	10.2	2.5 mill.				
MG08SDA800E			8,000			256		SIE/SED	260	9.9	2.0 mill.				
MG06SCA10TE			10,000					SIE/SED	249	11.0					
MG07SCA12TE		Helium CMR	12,000					SIE/SED	254	7.8					
MG07SCA14TE			14,000					SIE/SED	260	8.4					
MG08SCA14TE		Helium CMR	14,000					SIE	260	8.2	2.5 mill.				
MG08SCA16TE			16,000					SIE/SED	275	8.2					
MG09SCA16TE		Helium MAMR	16,000			512		SIE/SED	281	9.2					
MG09SCA18TE			18,000					SIE/SED	281	9.2					
MG10SCA20TE			20,000					SIE/SED	281	9.6					
MG04SCA20EA		Air CMR	2,000	4Kn	7,200	128	SAS 12 Gbit/s	SIE	215	11.8	1.4 mill.	1 in 10^{15}	24/7	550	5
MG04SCA40EA			4,000			128		SIE/SED	215	11.8					
MG08SDA400A			4,000			256		SIE/SED	255	8.5	2.0 mill.				
MG06SCA600A			6,000					SIE	241	9.5	2.5 mill.				
MG08SDA600A			6,000					SIE/SED	251	9.2	2.0 mill.				
MG06SCA800A			8,000					SIE/SED	249	10.2	2.5 mill.				
MG08SDA800A			8,000			256		SIE/SED	260	9.9	2.0 mill.				
MG06SCA10TA			10,000					SIE/SED	249	11.0					
MG07SCA12TA		Helium CMR	12,000					SIE/SED	254	7.8					
MG07SCA14TA			14,000					SIE/SED	260	8.4					
MG08SCA14TA		Helium CMR	14,000					SIE	260	8.2	2.5 mill.				
MG08SCA16TA			16,000					SIE/SED	275	8.2					
MG09SCA16TA		Helium MAMR	16,000			512		SIE/SED	281	9.2					
MG09SCA18TA			18,000					SIE/SED	281	9.2					
MG10SCA20TA			20,000					SIE/SED	281	9.6					
ENTERPRISE CAPACITY HDD WITH SATA 6 GBIT/S INTERFACE – MAINSTREAM SERVER AND STORAGE, HYPERSCALE- AND CLOUD STORAGE															
MG04ACA100N	3.5"	Air CMR	1,000	512n	7,200	128	SATA 6 Gbit/s	SIE	204	11.3	1.4 mill.	1 in 10^{15}	24/7	550	5
MG04ACA200N			2,000			128		SIE	204	11.3					
MG04ACA400N			4,000					SIE	204	11.3					
MG08ADA400N			4,000			256		SIE/SED	233	8.1	2.0 mill.				
MG04ACA200E		Air CMR	2,000	512e	7,200	128	SATA 6 Gbit/s	SIE	184	11.3	1.4 mill.	1 in 10^{15}	24/7	550	5
MG04ACA400E			4,000			128		SIE	194	11.3					
MG08ADA400E			4,000			256		SIE/SED	255	8.1	2.0 mill.				
MG06ACA600E			6,000					SIE	241	9.0	2.5 mill.				
MG08ADA600E			6,000					SIE/SED	251	8.7	2.0 mill.				
MG06ACA800E			8,000					SIE	241	9.8	2.5 mill.				
MG08ADA800E			8,000			256		SIE/SED	260	9.5	2.0 mill.				
MG06ACA10TE			10,000					SIE/SED	249	10.6					
MG07ACA12TE		Helium CMR	12,000					SIE/SED	254	7.8					
MG07ACA14TE			14,000					SIE/SED	260	8.0					
MG08ACA14TE		Helium CMR	14,000					SIE	260	7.7	2.5 mill.				
MG08ACA16TE			16,000					SIE/SED	275	7.7					
MG09ACA16TE		Helium MAMR	16,000			512		SIE/SED	281	8.3					
MG09ACA18TE			18,000					SIE/SED	281	8.3					
MG10ACA20TE			20,000					SIE/SED	281	9.3					
MG04ACA200A		Air CMR	2,000	4Kn	7,200	128	SATA 6 Gbit/s	SIE	184	11.3	1.4 mill.	1 in 10^{15}	24/7	550	5
MG04ACA400A			4,000			128		SIE	194	11.3					
MG08ADA400A			4,000			256		SIE/SED	255	8.1	2.0 mill.				
MG06ACA600A			6,000					SIE	241	9.0	2.5 mill.				
MG08ADA600A			6,000					SIE/SED	251	8.7	2.0 mill.				
MG06ACA800A			8,000					SIE	241	9.8	2.5 mill.				
MG08ADA800A			8,000			256		SIE/SED	260	9.5	2.0 mill.				
MG06ACA10TA			10,000					SIE	249	10.6					
MG07ACA12TA		Helium CMR	12,000					SIE	254	7.8					
MG07ACA14TA			14,000					SIE	260	8.0					
MG08ACA14TA		Helium CMR	14,000					SIE	260	7.7	2.5 mill.				
MG08ACA16TA			16,000					SIE/SED	275	7.7					
MG09ACA16TA		Helium MAMR	16,000			512		SIE/SED	281	8.3					
MG09ACA18TA			18,000					SIE/SED	281	8.3					
MG10ACA20TA			20,000					SIE/SED	281	9.3					

TOSHIBA