TOSHIBA

STORAGE SOLUTIONS
HARD DISK DRIVES
FOR PROFESSIONAL &
PERSONAL USE
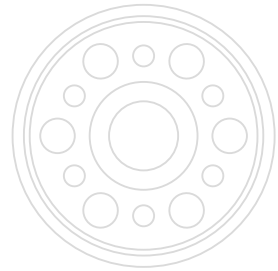
toshiba-storage.com

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 smartphones, tablets, Macs and Windows PCs.

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.

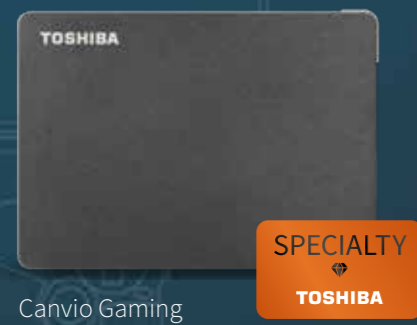Everything is possible – with the right partner and hard disk drive.

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.
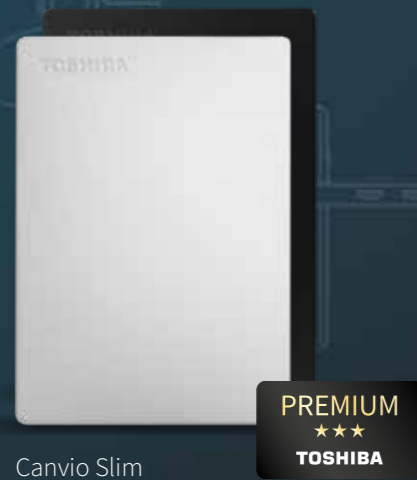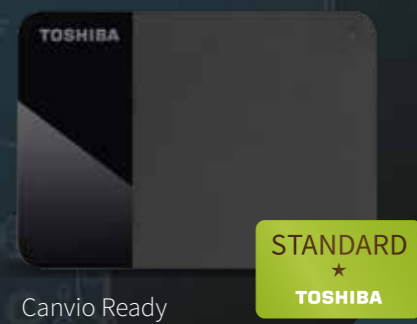
Watch video

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 Smartphones, Tablets, Macs
and Windows PCs*

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, tablets devices and smartphones 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 cable

Compatible with smartphones /
tablets/ Macs / Windows PCs

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.

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.

STANDARD
★
TOSHIBA

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

View more

8

Canvio Ready

Ready to Store. Simple to Use.

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.

STANDARD
★
TOSHIBA

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

View more

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							

USB Type-C® and USB-C® are registered trademarks of USB Implementers Forum. Android is a trademark of Google LLC. Mac and macOS are trademarks of Apple Inc. Microsoft, Windows and Xbox are trademarks of the Microsoft group of companies. „PlayStation" is a registered trademark or a trademark of Sony Interactive Entertainment Inc. Canvio Gaming: Estimated game storage is based on assumption of average game size of 36 GB for current generation games. The number of games actually stored may vary depending on file size, formatting, console software, and other programs or factors. Original discs may be required to verify ownership for games purchased and loaded from disc. Internet connection and original game owner's account may be required.

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

Quality in every detail

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

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.

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 & 22 TB HDD feature 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.

## Everything is possible – with the right drive.

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.
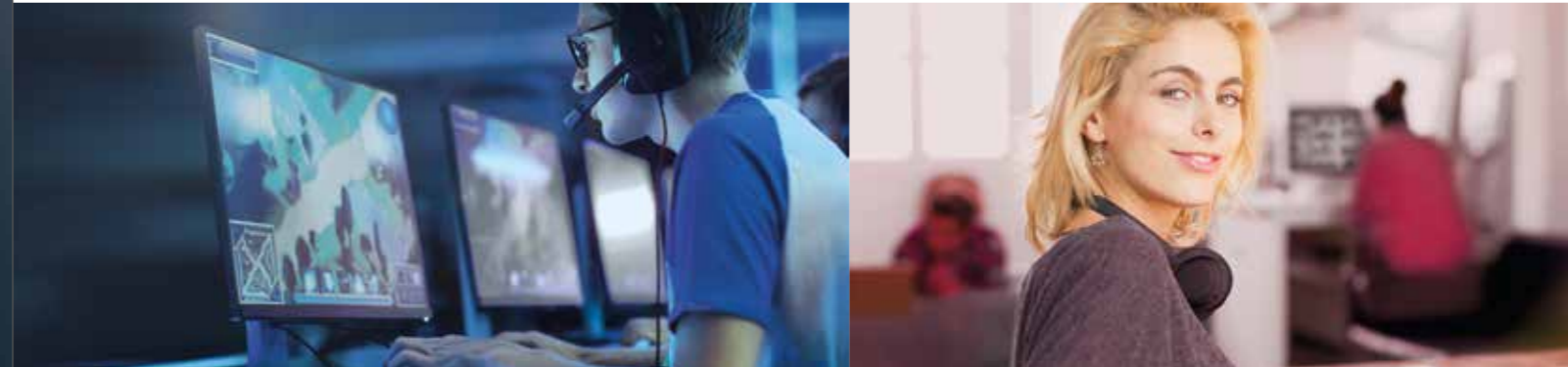
Performance Hard Drives

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.

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	16	14	12	10
TB	TB	TB	TB	TB

8	6	4
TB	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

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 or 256 MB 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 256 MB buffer (12 TB)
	Toshiba Stable Platter Technology
	Toshiba Dynamic Cache Technology

Capacities

20	18	16	14	12
TB	TB	TB	TB	TB

10	8	6	4
TB	TB	TB	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	8	6
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

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	4	2	1
TB	TB	TB	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 P300 Desktop PC Hard Drive delivers high performance for everyday home or office computing needs. With its two-stage actuator, you can count on smooth, responsive processing power. In addition, your data and media are secured with a loading ramp design to prevent data loss or drive wear and tear. The P300 is available in capacities up to 6 TB.

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:
• Desktop Workstations
• All-in-one PCs
• Desktop PCs
• External enclosures

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
	Toshiba Dynamic Cache Technology

### Capacities

2 TB   1 TB

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					
	HDWG51EEZSTA	–	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"											
	–	HDWR62AUZSVA	20 TB			512 MB					
	–	HDWR51JUZSVA	18 TB			512 MB					
	–	HDWR51GUZSVA	16 TB			512 MB					
	HDWR51EEZSTA	HDWR51EUZSVA	14 TB			512 MB					
	HDWR21CEZSTA	HDWR21CUZSVA	12 TB	SATA 6 Gbit/s	7,200	256 MB	26.1 mm	CMR	–	–	2
	HDWR71AEZSTA	HDWR71AUZSVA	10 TB			512 MB					
	HDWR780EZSTA	HDWR780UZSVA	8 TB			512 MB					
	HDWR760EZSTA	HDWR760UZSVA	6 TB			512 MB					
	HDWR740EZSTA	HDWR740UZSVA	4 TB			512 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"											
	–	HDWD260UZSVA	6TB		5,400	128 MB		SMR			
	–	HDWD240UZSVA	4TB		5,400	128 MB					
	–	HDWD130UZSVA	3TB	SATA 6 Gbit/s	7,200	64 MB	26.1 mm	CMR	–	–	2
	–	HDWD320UZSVA	2TB		7,200	256 MB					
	–	HDWD110UZSVA	1TB		7,200	64 MB		SMR			
L200 Laptop PC Hard Drive 2.5"											
	–	HDWL120UZSVA	2 TB	SATA 6 Gbit/s	5,400	128 MB	9.5 mm	SMR	–	–	2
	–	HDWL110UZSVA	1 TB			128 MB	7.0 mm				

AL Series

Enterprise Performance HDD
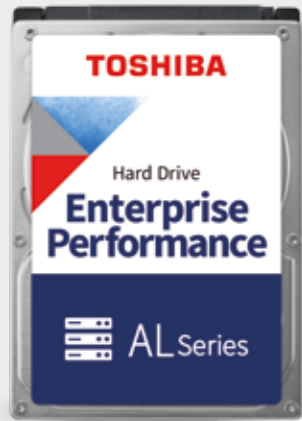
Toshiba's AL Series
Toshiba's Enterprise Performance Hard Drive – AL Series delivers high storage densities with rapid data transfer speed, backed up by a 5-year warranty. You can trust the AL Series to deliver day in and day out, 24/7, even in the most demanding high-performance server and storage systems. 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 22 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	MG10		MG07	MG09	MG10	
Capacity (TB)	1	2 | 4	6 | 8 | 10	12 | 14	16 | 18	20	22
I/F speed	-	SAS 12 Gbit/s				
	SATA 6 Gbit/s					
RPM	7,200					
Cache	512 MB		256 MB	512 MB		
Sector length	512n	512e*, 512n	512e*	512e, 4Kn		512e*
MTTF	2 mill. Hrs.		2.5 mill. Hrs.			
Sealed	Air		Helium			

* Changeable to 4Kn by field-reformatting

Technical data

AL Series

Enterprise Performance HDD

Model Number	Specification									Performance		Reliability				
	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)
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								7.0					
AL15SEB090N			900	512n	10,500	128	SAS 12 Gbit/s	SIE/SED		245	7.0	2.0 mill.	1 in 10^{16}	24/7	unlimited	5
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															
MG10SDA200N	3.5"	Air CMR	2,000	512n	7,200	512	SAS 12 Gbit/s	SIE/SED	204	8.7	2.0 mill.	1 in 10^{15}	24/7	550	5
MG10SDA400N			4,000						239	9.6					
MG07SCA12TA		Helium CMR	12,000	4Kn	7,200	256	SAS 12 Gbit/s	SIE/SED	254	7.8	2.5 mill.	1 in 10^{15}	24/7	550	5
MG07SCA14TA			14,000						260	8.4					
MG09SCA16TA		Helium MAMR	16,000			512				9.2					
MG09SCA18TA			18,000						281	9.2					
MG10SCA20TA			20,000							9.6					
MG10SDA200E	3.5"	Air CMR	2,000	512e	7,200	512	SAS 12 Gbit/s	SIE/SED	281	8.0	2.0 mill.	1 in 10^{15}	24/7	550	5
MG10SDA400E			4,000							8.9					
MG10SDA600E			6,000							9.7					
MG10SDA800E			8,000							10.5					
MG10SDA10TE			10,000							11.3					
MG07SCA12TE		Helium CMR	12,000			256			254	7.8					
MG07SCA14TE			14,000						260	8.4					
MG09SCA16TE		Helium MAMR	16,000							9.2	2.5 mill.				
MG09SCA18TE			18,000			512			281	9.2					
MG10SCA20TE			20,000							9.6					
MG10SFA22TE			22,000						284	10.2					
ENTERPRISE CAPACITY HDD WITH SATA 6 GBIT/S INTERFACE – MAINSTREAM SERVER AND STORAGE, HYPERSCALE- AND CLOUD STORAGE															
MG10ADA100N	3.5"	Air CMR	1,000	512n	7,200	512	SATA 6 Gbit/s	SIE/SED	221	7.6	2.0 mill.	1 in 10^{15}	24/7	550	5
MG10ADA200N			2,000						221	8.3					
MG10ADA400N			4,000						239	9.3					
MG07ACA12TA		Helium CMR	12,000	4Kn	7,200	256	SATA 6 Gbit/s	SIE/SED	254	7.8	2.5 mill.	1 in 10^{15}	24/7	550	5
MG07ACA14TA			14,000						260	8.0					
MG09ACA16TA		Helium MAMR	16,000			512				8.3					
MG09ACA18TA			18,000						281	8.3					
MG10ACA20TA			20,000							9.3					
MG10ADA200E	3.5"	Air CMR	2,000	512e	7,200	512	SATA 6 Gbit/s	SIE/SED	281	7.7	2.0 mill.	1 in 10^{15}	24/7	550	5
MG10ADA400E			4,000							8.6					
MG10ADA600E			6,000							9.3					
MG10ADA800E			8,000							10.1					
MG10ADA10TE			10,000							11.0					
MG07ACA12TE		Helium CMR	12,000			256			254	7.8					
MG07ACA14TE			14,000						260	8.0					
MG09ACA16TE		Helium MAMR	16,000							8.3	2.5 mill.				
MG09ACA18TE			18,000			512			281	8.3					
MG10ACA20TE			20,000							9.3					
MG10AFA22TE			22,000						284	9.8					

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