TOSHIBA
Leading Innovation

Storage Solutions

Write your story.

External &
Internal
Hard Drives

Write your story.

With TOSHIBA
External and Internal Hard Drives.

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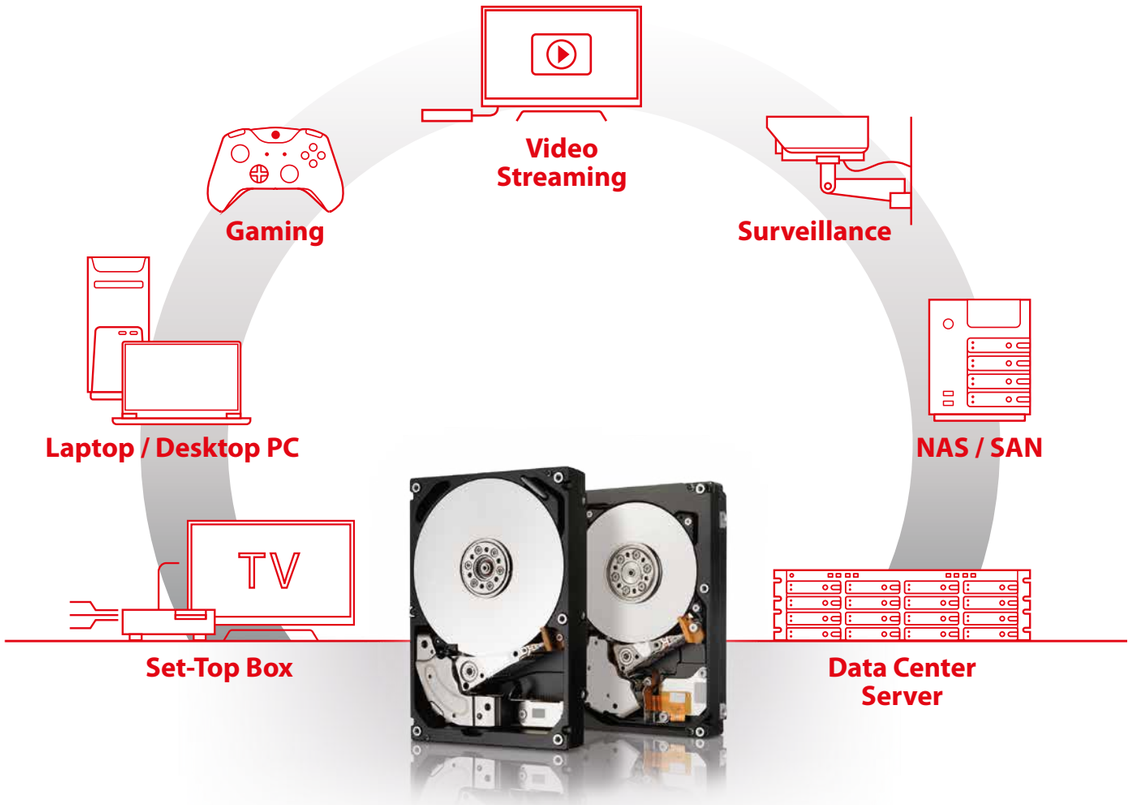
World of storage



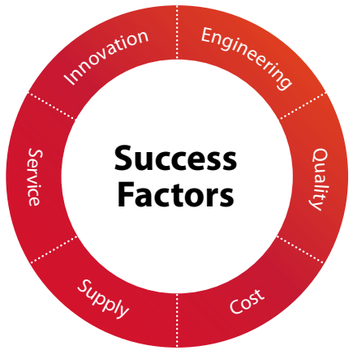
Everybody has their own story.

Stories are told in all areas of life, and their value can rarely be measured in monetary terms. Some have an emotional character, while others are existential in nature. But it doesn't matter if you want to write history or not: Great ideas need great data storage solutions that are reliable, give the best performance, and are safe.

So here we are, giving you the tools and the hard drive to thrive. No matter if you are a private, professional, or enterprise user, the application areas for data storage are very broad. And whether you need external storage or internal hard drives for NAS, surveillance, or for increasing performance in PCs and laptops, Toshiba has the right storage solution for you.

For over 50 years, customers have trusted Toshiba to deliver high-value storage solutions for their needs. Get an overview of our portfolio and find your perfect storage solution. Everything is possible – with the right partner.

Partnership



Partnership is our gold standard

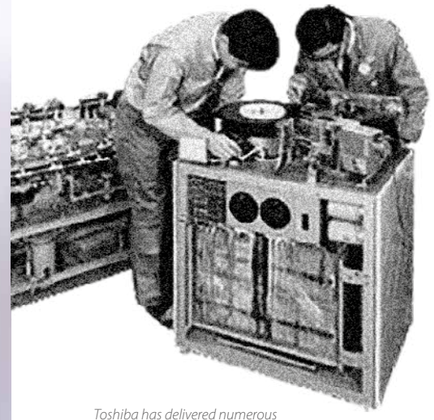
Our success is based on a firm partner orientation: Your metrics are our metrics. The result is a broad range of proven HDD solutions for private, professional, and enterprise use. The products are designed to meet your specific needs.

Why TOSHIBA? Because we focus on your business!

Our quality assurance process is designed to fit your requirements. We understand your critical success factors through constant evaluation, and then make them our own success factors.

We always listen to our customers, and we deliver technology that is designed specifically to achieve their targets. This results in the highest quality solutions that can be seamlessly integrated into our customers' businesses. Our enterprise-level developments meet the industry standards with proven reliability. And we always keep cost in mind in order to offer high returns on investment.

Our dense network of specialized dealers optimizes availability of our products and services. This gives you certainty that you can rely on fast local service throughout the world.

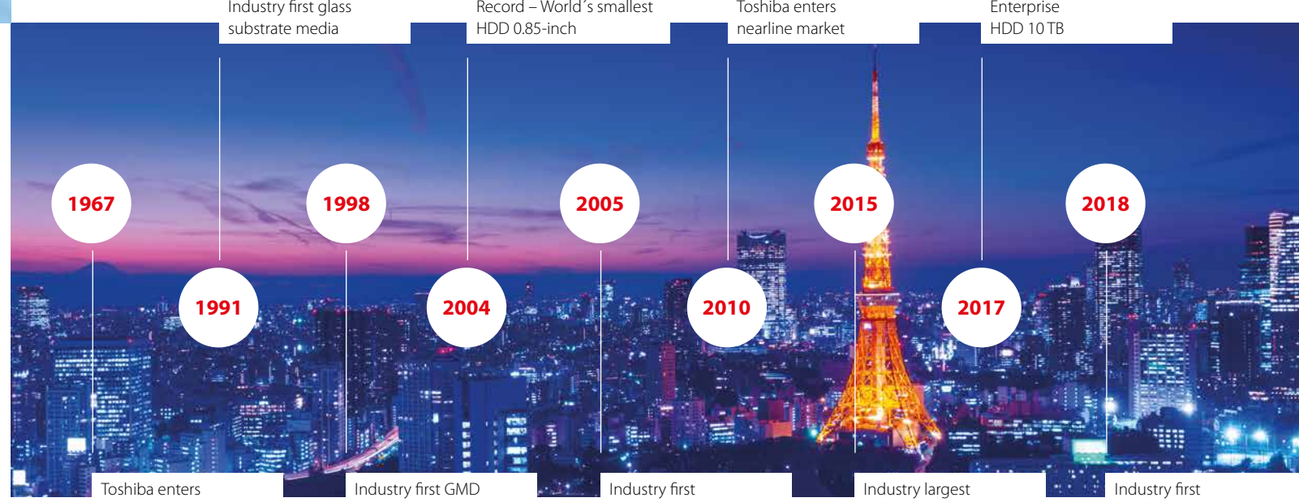


Toshiba has delivered numerous industry firsts and world number ones.

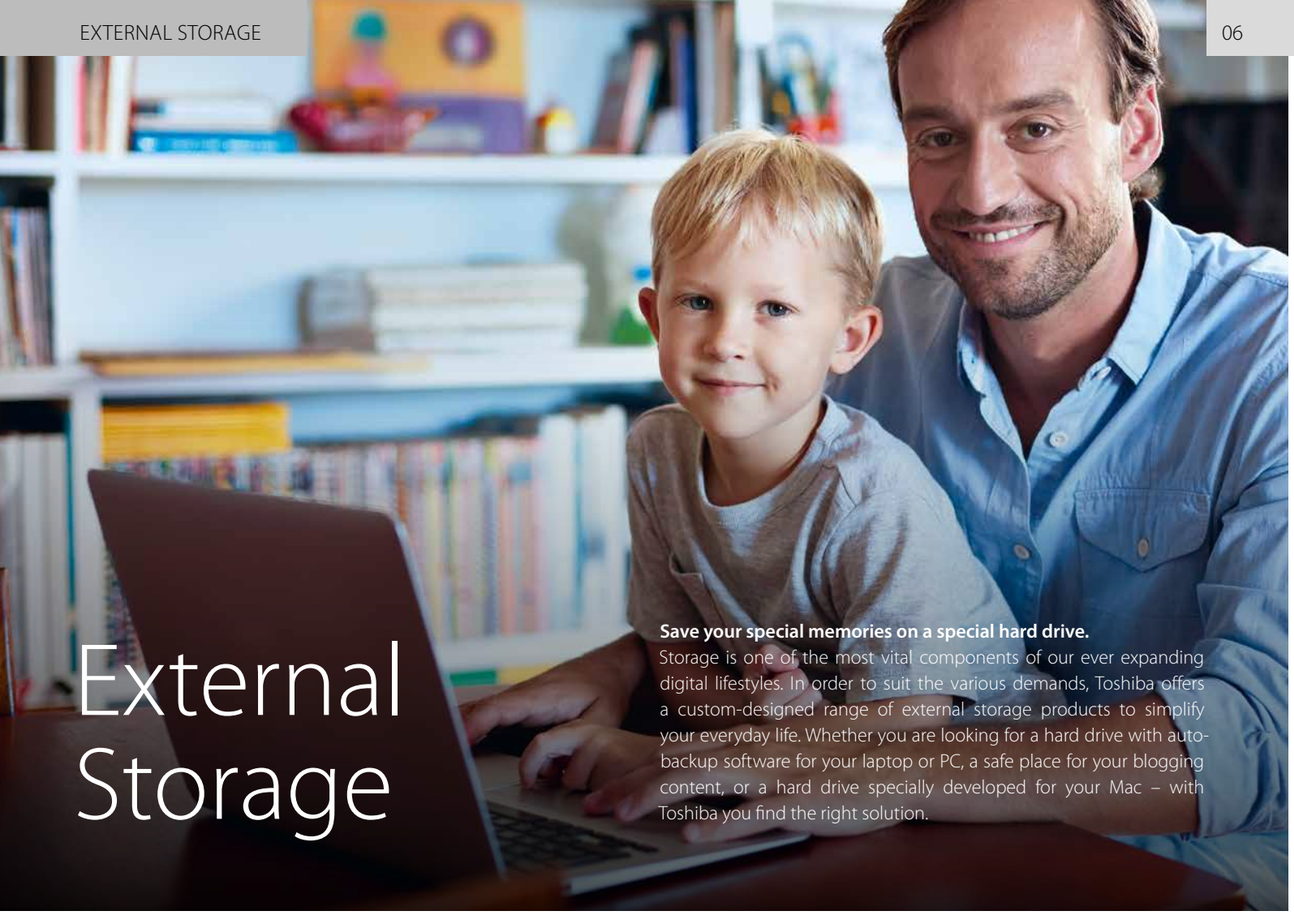
History

Toshiba has been one of the leading data storage companies since 1967. Where others have come and gone, we have been able to maintain our leadership position for more than 50 years. In the 1990s, there were close to 50 suppliers of storage technology, and now there are just three. In 2004 we set a record for integrating the smallest HDD into a digital camcorder. In 2018 we introduced the world's first 14 TB CMR-based helium server hard drive. Whatever the digital future demands, we will keep developing the right solutions for our customers.

The mini-disk measures exactly 0.85 inches – about the size of a one euro coin, and almost as flat.



Toshiba established itself early as a reliable partner for innovative solutions and maintains this position today.



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, a safe place for your blogging content, or a hard drive specially developed for your Mac – with Toshiba you find the right solution.

Canvio Premium for Mac

The ideal match for your Mac

- 2.5" 2.5" External Hard Drive
- High quality aluminium design with diamond-cut edges
- SuperSpeed USB 3.0 port
- USB-powered
- Type-C adapter (Type-A to -C)
- Compatible with Apple Time Machine
- Password protection software
- Soft pouch included
- 3-year warranty

Colours

Capacities

3 TB 2 TB 1 TB

The ideal Mac companion
A smart aluminium design with diamond-cut edges makes this drive a perfect match to any modern Mac device, giving you up to 3 TB of storage at your desk or on the move. To protect your Canvio Premium for Mac whilst on the move, a soft carry pouch is included.

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

3 TB 2 TB 1 TB

High-class storage for all your files
Up to 3 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 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

3 TB 2 TB 1 TB

Multiple colours and features
The USB-powered Canvio Advance puts up to 3 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 TB | 1 TB | 500 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

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 3 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 for Desktop

High capacity, high speed

TOSHIBA ADVANCED ★★

- 3.5″ 3.5″ External Hard Drive
- Stylish and versatile design
- SuperSpeed USB 3.0 port
- Backup software
- Security lock slot

Colour

Capacities

6 TB | 5 TB | 4 TB | 3 TB | 2 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 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

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 3 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.

Internal Storage

Everything is possible – with the right tools.

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.

NAS Hard Drives

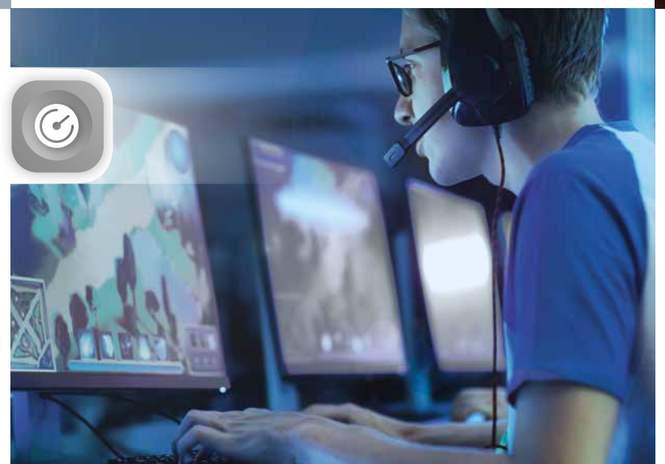
Offering special reliability for NAS and other high-performance storage systems, Toshiba's NAS drives are optimized to meet the reliability, endurance, performance, and scalability requirements of 24/7 high-capacity storage for personal, home office, and small business use.

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.

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.



Enterprise Hard Drives

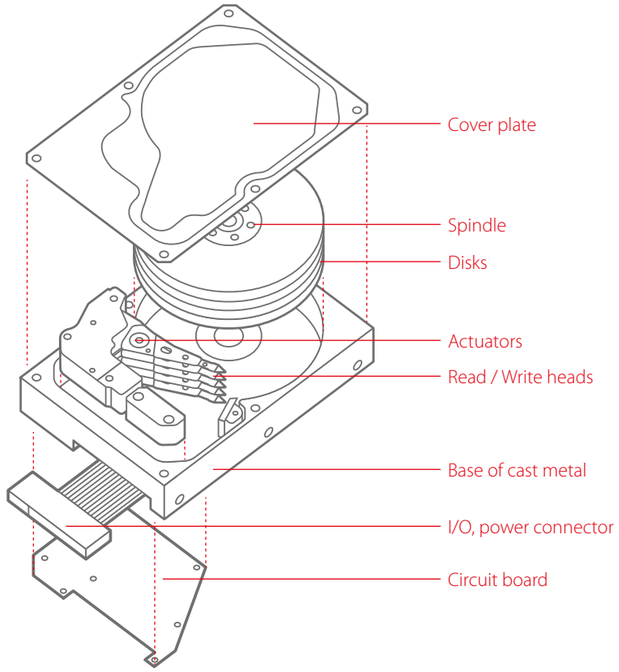
Designed for server environments where high data capacity and performance matters, Toshiba's reliable Enterprise drives offer the necessary capacities and performance features required to run business- and mission-critical enterprise applications or to perform simultaneous transactions smoothly and efficiently.

INTERNAL STORAGE

The Right Internal Hard Drive For You

Toshiba offers a broad portfolio of internal hard disk drives, providing you with the capacity to keep pace with rapid data growth. They all feature innovative technologies to deliver the core values for each application such as efficiency, continuity, and quality.

Choose from a clearly structured line-up of hard disk drives, from NAS to surveillance and video streaming, or expand your PC and laptop with additional capacities or performance.



Hard drive components

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 (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

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

Toshiba Stable Platter Technology

Toshiba Dynamic Cache Technology

Capacities

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

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-year warranty

Capacities

10 TB | 8 TB | 6 TB | 5 TB | 4 TB

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.

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

P300

Performance meets reliability

SATA 3.5" SATA Hard Drive

RPM 7,200 rpm

64 MB buffer

Advanced Format

Capacities

3 TB | 2 TB | 1 TB | 500 GB

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.

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

V300

Stream, record, and edit

SATA 3.5" SATA Hard Drive

RPM 5,940 rpm (3 TB) | 5,700 rpm

64 MB buffer

Silent Seek Technology

24/7 24/7 operation

Capacities

3 TB | 2 TB | 1 TB | 500 GB

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.

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

L200

Take your laptop to the next level

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

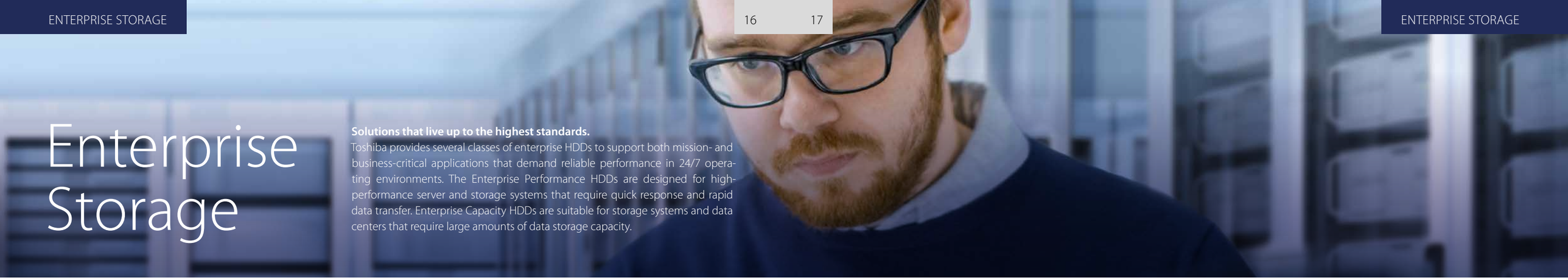
Capacities

2 TB | 1 TB | 500 GB

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.

Use for:
- Notebooks
- Game consoles
- External enclosures

ENTERPRISE STORAGE

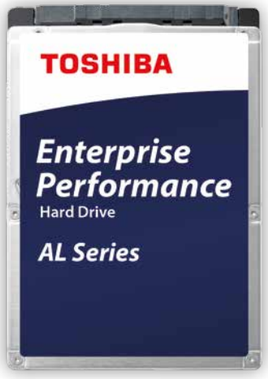


Enterprise Storage

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	AL13SX	AL14SX	AL14SE	AL15SE
Capacity (GB)	300 | 450 | 600	300 | 600 | 900	300 | 450 600 | 900 1,200 | 1,800	300 | 600 900 | 1,200 1,800 | 2,400
I/F speed	SAS 6 Gbit/s SAS 12 Gbit/s	SAS 12 Gbit/s		
RPM	15,000		10,500	
Cache	64 | 128 MB	128 MB		
MTTF	2.0 mill. hours			
Data transfer rate (MB/s)	228(512n, 6 Gbit/s), 239(512n, 12 Gbit/s), 255(512e, 4Kn)	304(4Kn, 512e), 273(512n)	237(4Kn, 512e), 215(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
Capacity (TB)	1 | 2 | 3 4 | 5 | 6	6 | 8	6 | 8 | 10	12 | 14
I/F speed	SAS 12 Gbit/s	-	-	-
	SATA 6 Gbit/s			
RPM	7,200			
Cache	128 MB		256 MB	
Sector length	512e, 4Kn, 512n	512e, 4Kn		512e, 4Kn
MTTF	1.4 mill.	2.0 mill.	2.5 mill.	2.5 mill.
Sealed	Air			Helium

Technical data

External HDD

Model	Range	Casing	Part Number	Capacity	Interface	PC	MAC	Backup Software	Password Lock	Additional Features
Canvio Premium ★★★										
	TOSHIBA PREMIUM ★★★	Aluminium	HDTW230ES3CA	3 TB	USB 3.0 USB 2.0	✔	–	✔	✔	Soft pouch, Type-C connector
			HDTW220ES3AA	2 TB						
			HDTW210ES3AA	1 TB						
	TOSHIBA PREMIUM ★★★	Aluminium	HDTW230EB3CA	3 TB	USB 3.0 USB 2.0	✔	–	✔	✔	Soft pouch, Type-C connector
			HDTW220EB3AA	2 TB						
			HDTW210EB3AA	1 TB						
Canvio Premium for Mac ★★★										
	TOSHIBA PREMIUM ★★★	Aluminium	HDTW130ECMCA	3 TB	USB 3.0 USB 2.0	–	✔	Time Machine compatible	✔	Soft pouch, Type-C connector
			HDTW120ECMCA	2 TB						
			HDTW110ECMAA	1 TB						
	TOSHIBA PREMIUM ★★★	Aluminium	HDTW130EBMCA	3 TB	USB 3.0 USB 2.0	–	✔	Time Machine compatible	✔	Soft pouch, Type-C connector
			HDTW120EBMCA	2 TB						
			HDTW110EBMAA	1 TB						
Canvio Advance ★★										
	TOSHIBA ADVANCED ★★	Piano Gloss	HDTC930ER3CA	3 TB	USB 3.0 USB 2.0	✔	–	✔	✔	–
			HDTC920ER3AA	2 TB						
			HDTC910ER3AA	1 TB						
	TOSHIBA ADVANCED ★★	Piano Gloss	HDTC930EL3CA	3 TB	USB 3.0 USB 2.0	✔	–	✔	✔	–
			HDTC920EL3AA	2 TB						
			HDTC910EL3AA	1 TB						
	TOSHIBA ADVANCED ★★	Piano Gloss	HDTC930EW3CA	3 TB	USB 3.0 USB 2.0	✔	–	✔	✔	–
			HDTC920EW3AA	2 TB						
			HDTC910EW3AA	1 TB						
	TOSHIBA ADVANCED ★★	Piano Gloss	HDTC930EK3CA	3 TB	USB 3.0 USB 2.0	✔	–	✔	✔	–
			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 for Desktop ★★										
	TOSHIBA ADVANCED ★★	Piano Gloss	HDWC360EK3JA	6 TB	–	✔	–	✔	–	Security lock slot
			HDWC350EK3JA	5 TB						
			HDWC340EK3JA	4 TB						
			HDWC330EK3JA	3 TB						
			HDWC320EK3JA	2 TB						
Canvio Basics ★										
	TOSHIBA STANDARD ★	Matt	HDTB330EK3CB	3 TB	USB 3.0 USB 2.0	✔	–	–	–	–
			HDTB420EK3AA	2 TB						
			HDTB410EK3AA	1 TB						
			HDTB405EK3AA	500 GB						
Canvio Ready ★										
	TOSHIBA STANDARD ★	Dot pattern	HDTP230EK3CA	3 TB	USB 3.0 USB 2.0	✔	–	–	–	–
			HDTP220EK3CA	2 TB						
			HDTP210EK3AA	1 TB						
			HDTP205EK3AA	500 GB						

Technical data

Internal HDD

Model	Retail Number	Bulk Number	Capacity	Interface	RPM	Cache	Height	24/7 Operation	Warranty (years)
N300 NAS Hard Drive 3.5“									
	HDWG11AEZSTA	HDWG11AUZSVA	10 TB	SATA 6 Gbit/s	7,200	256 MB	26.1 mm	Supported	3
	HDWN180EZSTA	HDWN180UZSVA	8 TB			128 MB			
	HDWN160EZSTA	HDWN160UZSVA	6 TB			128 MB			
	HDWQ140EZSTA	HDWQ140UZSVA	4 TB			128 MB			
X300 Performance Hard Drive 3.5“									
	HDWR11AEZSTA	HDWR11AUZSVA	10 TB	SATA 6 Gbit/s	7,200	256 MB	26.1 mm	–	2
	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		

Technical data

Application

AL Series

Enterprise Performance HDD

Model Number	Specification									Performance					Reliability				
	Form-factor	Fill Gas	Capacity (GB)	Block Size (Byte)	Spindle Speed (RPM)	Buffer Size (MiByte)	Interface	Security Options		Average Latency (ms)	Average Seek Time (ms) read	Average Seek Time (ms) write	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																			
AL13SXB300N	2.5"	Air	300	512n	15,000	64	SAS 6 Gbit/s	–		2.0	2.7	3.0	228	9.0	2.0 mill.	1 in 10^{16}	24/7	unlimited	5
AL13SXB450N			450																
AL13SXB600N			600																
AL13SXB30EN			300	512n	15,000	128	SAS 12 Gbit/s	–		2.0	2.7	2.95	239	8.7	2.0 mill.	1 in 10^{16}	24/7	unlimited	5
AL13SXB45EN			450																
AL13SXB60EN			600																
AL13SXB30EE			300	512e									255						
AL13SXB45EE			450																
AL13SXB60EE			600																
AL13SXB30EA			300	4Kn	15,000	128	SAS 12 Gbit/s	–		2.0	2.7	2.95	255	8.7	2.0 mill.	1 in 10^{16}	24/7	unlimited	5
AL13SXB45EA			450																
AL13SXB60EA			600																
HIGHEST PERFORMANCE HDD (15K RPM) FOR SERVERS – BUSINESS DATABASE, ONLINE TRANSACTION, HIGH PERFORMANCE COMPUTING																			
AL14SXB30EN	2.5"	Air	300	512n	15,000	128	SAS 12 Gbit/s	SIE/SED		2.0	2.95	3.25	273	9.0	2.0 mill.	1 in 10^{16}	24/7	unlimited	5
AL14SXB60EN			600																
AL14SXB90EN			900																
AL14SXB30EE			300	512e	15,000	128	SAS 12 Gbit/s	SIE/SED		2.0	2.95	3.25	304	9.0	2.0 mill.	1 in 10^{16}	24/7	unlimited	5
AL14SXB60EE			600																
AL14SXB90EE			900																
AL14SXB30EA			300	4Kn	15,000	128	SAS 12 Gbit/s	SIE/SED		2.0	2.95	3.25	304	9.0	2.0 mill.	1 in 10^{16}	24/7	unlimited	5
AL14SXB60EA			600																
AL14SXB90EA			900																
HIGHEST PERFORMANCE HDD (10K RPM) FOR SERVERS – BUSINESS DATABASE, ONLINE TRANSACTION, HIGH PERFORMANCE COMPUTING																			
AL14SEB030N	2.5"	Air	300	512n	10,500	128	SAS 12 Gbit/s	SIE/SED/FIPS		2.86	3.5	3.9	215	8.7	2.0 mill.	1 in 10^{16}	24/7	unlimited	5
AL14SEB045N			450								3.7	4.1							
AL14SEB060N			600																
AL14SEB090N			900																
AL14SEB120N			1,200																
AL14SEB06EQ			600	512e	10,500	128	SAS 12 Gbit/s	SIE/SED/FIPS		2.86	3.7	4.1	237	7.8	2.0 mill.	1 in 10^{16}	24/7	unlimited	5
AL14SEB09EQ			900								4.0	4.4							
AL14SEB12EQ			1,200																
AL14SEB18EQ			1,800																
AL14SEB06EP			600	4Kn	10,500	128	SAS 12 Gbit/s	SIE/SED/FIPS		2.86	3.7	4.1	237	7.8	2.0 mill.	1 in 10^{16}	24/7	unlimited	5
AL14SEB09EP			900								4.0	4.4							
AL14SEB12EP			1,200																
AL14SEB18EP			1,800																
PERFORMANCE HDD (10K RPM) FOR SERVERS AND STORAGE – MISSION CRITICAL BUSINESS DATABASE AND HIGH PERFORMANCE STORAGES																			
AL15SEB030N	2.5"	Air	300	512n	10,500	128	SAS 12 Gbit/s	SIE/SED		2.86	4.2	4.6	236	6.5	2.0 mill.	1 in 10^{16}	24/7	unlimited	5
AL15SEB060N			600										245	7.0					
AL15SEB090N			900											7.0					
AL15SEB120N			1,200											8.1					
AL15SEB06EQ			600	512e	10,500	128	SAS 12 Gbit/s	SIE/SED		2.86	4.2	4.6	273	6.5	2.0 mill.	1 in 10^{16}	24/7	unlimited	5
AL15SEB09EQ			900											7.0					
AL15SEB12EQ			1,200											7.0					
AL15SEB18EQ			1,800											8.1					
AL15SEB24EQ			2,400											8.7					
AL15SEB06EP			600	4Kn	10,500	128	SAS 12 Gbit/s	SIE/SED		2.86	4.2	4.6	273	6.5	2.0 mill.	1 in 10^{16}	24/7	unlimited	5
AL15SEB09EP			900											7.0					
AL15SEB12EP			1,200											7.0					
AL15SEB18EP			1,800											8.1					
AL15SEB24EP			2,400											8.7					

Technical data

Application

MG Series

Enterprise Capacity HDD

Model Number	Specification								Performance					Reliability				
	Form-factor	Fill Gas	Capacity (GB)	Block Size (Byte)	Spindle Speed (RPM)	Buffer Size (MiByte)	Interface	Security Options	Average Latency (ms)	Average Seek Time (ms) read	Average Seek Time (ms) write	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	2,000	512n	7,200	128	SAS 12 Gbit/s	SIE	4.2	8.5	9.5	204	11.8	1.4 mill.	1 in 10^{15}	24/7	550	5
MG04SCA40EN			4,000					SIE										
MG04SCA20EE			2,000	512e				SIE										
MG04SCA40EE			4,000					SIE/SED				215						
MG04SCA60EE			6,000					SIE/SED										
MG04SCA20EA			2,000	4Kn				SIE										
MG04SCA40EA			4,000					SIE/SED										
MG04SCA60EA			6,000					SIE/SED										
ENTERPRISE CAPACITY HDD WITH SATA INTERFACE – MAINSTREAM SERVER AND STORAGE, HYPERSCALE- AND CLOUD STORAGE																		
MG04ACA100N		Air	1,000	512n	7,200	128	SATA 6 Gbit/s	SIE	4.2	8.5	9.5	204	11.3	1.4 mill.	1 in 10^{15}	24/7	550	5
MG04ACA200N			2,000															
MG04ACA400N			4,000															
MG04ACA200E			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
MG04ACA300E			3,000			128						194						
MG04ACA400E			4,000			128						194						
MG04ACA500E			5,000			128						215						
MG04ACA600E			6,000			128						215						
MG06ACA600E			6,000			256						241	8.97	2.5 mill.				
MG05ACA800E			8,000			128						241	11.4	2.0 mill.				
MG06ACA800E			8,000			256						241	9.81					
MG06ACA10TE		Helium	10,000			256						249	10.62	2.5 mill.				
MG07ACA12TE			12,000			256						254	7.8					
MG07ACA14TE			14,000			256						260						
MG04ACA200A		Air	2,000	4Kn	7,200	128	SATA 6 Gbit/s	SIE	4.2	8.5	9.5	184	11.3	1.4 mill.	1 in 10^{15}	24/7	550	5
MG04ACA300A			3,000			128						194						
MG04ACA400A			4,000			128						194						
MG04ACA500A			5,000			128						215						
MG04ACA600A			6,000			128						215						
MG06ACA600A			6,000			256						241	8.97	2.5 mill.				
MG05ACA800A			8,000			128						241	11.4	2.0 mill.				
MG06ACA800A			8,000			256						241	9.81					
MG06ACA10TA		Helium	10,000			256						249	10.62	2.5 mill.				
MG07ACA12TA			12,000			256						254	7.8					
MG07ACA14TA			14,000			256						260						

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.
- DWPD (Drive Write Per Day): One full drive write per day means the drive can be written and re-written to full capacity once a day every day for five years, the stated product warranty period. Actual results may vary due to system configuration, usage and other factors.
- OPS: Input Output Per Second (or the number of I/O operations per second)
- 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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