



Solutions Guide

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THE HUMAN FACE OF DATA

At Seagate, we believe data is wisdom and storage is a living room—a space where memories of the past and visions for the future come to new and brilliant life.

Harnessing the power of data to do amazing things

We create award-winning data storage and cloud solutions. But that's not what gets us up in the morning. And it's not what powers us through the night.

What drives our engineers and researchers is their passion to bring lightning-fast products into the world. Products that make it possible to crack puzzles and analyze patterns. To invent ideas and stream dreams. Products that contribute to the safety of our cities and help our businesses scale.

At Seagate, we're all about providing people with the big and beautiful rooms they need to be smart. To grow. To amaze. In short, creating the space that makes it possible for everyone, everywhere to participate in the endlessly exciting, ever-evolving story of us.





Choose your solution

At Seagate, we're dedicated to revolutionizing your world. From our sleek portable solutions that make the space for your photographs, files, movies and music, to our award-winning business platforms and surveillance systems, Seagate makes it possible for the world to share, store and stream what matters most.

Consumer Products				
	Backup	Stream	Share	Upgrade
YOUR NEED	Protect your digital life	Expand your tablet and phone	Turn your home into a personal cloud	Increase performance and capacity
OUR SOLUTION	Backup Plus Ultra Slim Backup Plus Portable Backup Plus Slim Backup Plus Fast Expansion Portable Game Drive for Xbox Seven Expansion Desktop Innov8 Backup Plus Desktop Backup Plus Hub	Wireless Wireless Plus	Personal Cloud	Laptop SSHD Retail Kit Laptop HDD Retail Kit Game Drive for PlayStation Desktop SSHD Retail Kit Desktop HDD Retail Kit
APPLICATION	Laptop & Desktop	Tablet & Phone	Laptop, Desktop, Tablet, Phone & TV	Personal Mobile Slim Devices Personal Desktop

Internal/Specialty Products			
	BARRACUDA COMPUTE	IRONWOLF NAS	SKYHAWK SURVEILLANCE
YOUR NEED	Versatile, Fast, Dependable	Tough, Ready, Scalable	Smart, Safe, Secure
OUR SOLUTION	BarraCuda® BarraCuda Pro FireCuda™	IronWolf™ IronWolf Pro	SkyHawk™
APPLICATION	Laptop Computing Desktop Computing PC Gaming Creative Pro Applications	Network-Attached Storage Devices (NAS) Small/Medium Enterprise	Surveillance DVR Surveillance NVR

Enterprise/Data Center Products		
	HDD	SSD
YOUR NEED	Maximize your storage efficiency with high capacity and performance	Improve speed, density and TCO in data centers
OUR SOLUTION	Enterprise Capacity 3.5 HDD (Helium) Enterprise Capacity 3.5 HDD Archive HDD Enterprise NAS HDD Terascale® HDD Enterprise Capacity 2.5 HDD Kinetic HDD Enterprise Performance 15K HDD Enterprise Performance 10K HDD	1200.2 SAS SSD Nytro® XF1230 SATA SSD Nytro XF1440/XM1440 NVMe SSDs Nytro XP7102 NVMe Add-In Card Nytro XP7200 NVMe Add-In Card
APPLICATION	High-Performance Computing Big Data Analytics Content Storage Cloud Hyperscale Enterprise SAN and NAS	IOPS-Hungry Enterprise All-Flash Arrays Cloud Computing High-Performance Database Dense Environments

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Consumer Products

Seagate has the industry's broadest portfolio of drives created and tailored specifically for your applications. Seagate's external desktop and portable drives allow easy backup for your most important files, and accessibility to your videos and photos while you're on-the-go. Seagate's full line of flash-accelerated hybrid drives provide you with the capacity you need and the performance you crave for your games and other applications running on desktop and laptop PCs.

 Backup	 Stream	 Share	 Upgrade
Protect your digital life	Expand your tablet and phone	Turn your home into a personal cloud	Increase performance and capacity
Backup Plus Ultra Slim Backup Plus Portable Backup Plus Slim Backup Plus Fast Expansion Portable Game Drive for Xbox Seven Expansion Desktop Innov8 Backup Plus Desktop Backup Plus Hub	Wireless Wireless Plus	Personal Cloud	Laptop SSHD Retail Kit Laptop HDD Retail Kit Game Drive for PlayStation Desktop SSHD Retail Kit Desktop HDD Retail Kit
Laptop & Desktop	Tablet & Phone	Laptop, Desktop, Tablet, Phone & TV	Personal Computer Gaming Console



Backup

Seagate offers the widest range of portable and desktop drives in many colors and finishes with capacities from 500GB to 8TB. All drives allow easy backup, whether you are at home or away; they help protect your entire digital life locally, in the cloud, from mobile devices or from social networks.

Portable Drives

	Backup Plus Ultra Slim	Backup Plus Portable	Backup Plus Slim	Backup Plus Fast	Expansion Portable	Game Drive for Xbox	Seven
Perfect for	Fashionable high-capacity portable storage	High-capacity portable storage	Portable storage or backup	High performance and capacity storage	Additional portable storage	Add-on game storage	Sleek portable storage
Capacity	2TB, 1TB	4TB	2TB, 1TB, 500GB	4TB	4TB, 3TB, 2TB, 1TB, 500GB	4TB, 2TB	500GB
Compatibility	PC, Mac	PC, Mac	PC, Mac	PC, Mac	PC	Xbox One or Xbox 360	PC, Mac

Desktop Drives

	Expansion Desktop	Innov8	Backup Plus Desktop	Backup Plus Hub
Perfect for	Add-on storage	Add-on storage for USB-C computer	Backup or add-on storage	Backup or add-on storage
Capacity	5TB, 4TB, 3TB, 2TB	8TB	4TB, 3TB	8TB, 6TB, 4TB
Compatibility	PC	PC, Mac	PC, Mac	PC, Mac

Backup Plus Ultra Slim

Style meets storage. The Backup Plus Ultra Slim Drive provides sleek, easy backup for your PC, Mac and mobile devices.

1TB, 2TB | USB 3.0 | PC, Mac

Key Advantages

- The thinnest 1TB and 2TB portable drive in the world at 9.6mm thin
- Eye-catching gold and platinum colors to complement your other essential devices
- High capacity and portability—designed for you to carry large digital file libraries

Best-Fit Applications

- On-the-go accessibility and portability for your important files
- Backup for your project files, photos and movies
- Fashionable storage for your latest computer



PRODUCT DIMENSIONS	4.47-in L x 2.99-in W x 0.38-in D (113.5mm x 76mm x 9.6mm)
PACKAGE DIMENSIONS	5.79-in L x 4.11-in W x 1.28-in D (147mm x 104.5mm x 32.5mm)



Backup Plus Portable

The Backup Plus Portable Drive offers the mobility of a portable with the high capacity of a desktop drive.

4TB | USB 3.0 | PC, Mac

Key Advantages

- Mobility of a portable drive with the high capacity of a desktop drive
- Large 4TB capacity to store and carry your movie, music and photo collections
- Up to 53.6% thinner than comparable 4TB drives
- Easy, flexible backups for your computers, tablets and smartphones

Best-Fit Applications

- Store and carry large digital media libraries
- Backup for all your devices and social networks in one drive
- Portable design, completely bus powered



PRODUCT DIMENSIONS 4.508-in L x 3.071-in W x 0.807-in D (114.5mm x 78mm x 20.5mm)

PACKAGE DIMENSIONS 5.748-in L x 4.134-in W x 1.693-in D (146mm x 105mm x 43mm)

Backup Plus Slim Portable

The Backup Plus Slim Portable Drive is the simple way to protect and share your entire digital life.

500GB – 2TB | USB 3.0 | PC, Mac

Key Advantages

- Thinnest 2TB portable drive available, up to 42% thinner
- Easy, flexible backups
- Backup photos and videos from smart phones and tablets
- Automatically saves photos from social networks
- Photos and videos can be shared to social networks with a click

Best-Fit Applications

- Store or back up photos, movies, music and documents
- Mobile device backup
- Download and save content that's posted on your social networks



PRODUCT DIMENSIONS (1TB, 2TB) 4.47-in L x 2.99-in W x 0.48-in D (113.5mm x 76mm x 12.1mm)

PRODUCT DIMENSIONS (500GB) 4.47-in L x 2.99-in W x 0.38-in D (113.5mm x 76mm x 9.6mm)

PACKAGE DIMENSIONS 5.71-in L x 4.11-in W x 1.28-in D (145mm x 104.5mm x 32.5mm)

Backup Plus Portable for Mac

The Backup Plus Portable Drive for Mac offers the mobility of a portable drive with the high capacity of a desktop drive.

4TB | USB 3.0 | PC, Mac

Key Advantages

- Mac-ready, on-the-go storage enhanced by durable design and exceptional reliability
- Large 4TB capacity to store and carry your movie, music and photo collections
- Up to 53.6% thinner than comparable 4TB drives
- Easy, flexible backups for your computers, tablets and smartphones

Best-Fit Applications

- Store and carry large digital media libraries
- Backup for all your devices and social networks in one drive
- Portable design, completely bus powered



PRODUCT DIMENSIONS 4.508-in L x 3.071-in W x 0.807-in D (114.5mm x 78mm x 20.5mm)

PACKAGE DIMENSIONS 5.748-in L x 4.134-in W x 1.693-in D (146mm x 105mm x 43mm)

Backup Plus Slim Portable for Mac

The Backup Plus Slim Portable Drive for Mac is the simple way to protect and share your entire digital life.

500GB – 2TB | USB 3.0 | PC, Mac

Key Advantages

- Mac OS and Time-Machine ready out of the box
- Back up photos and videos from smart phones and tablets
- Automatically saves photos from social networks

Best-Fit Applications

- Store or back up photos, movies, music and documents
- Mobile device backup
- Download and save content that's posted on your social networks



PRODUCT DIMENSIONS (1TB, 2TB) 4.47-in L x 2.99-in W x 0.48-in D (113.5mm x 76mm x 12.1mm)

PRODUCT DIMENSIONS (500GB) 4.47-in L x 2.99-in W x 0.38-in D (113.5mm x 76mm x 9.6mm)

PACKAGE DIMENSIONS 5.71-in L x 4.11-in W x 1.28-in D (145mm x 104.5mm x 32.5mm)

Backup Plus Fast Portable

The Backup Plus Fast Portable Drive has up to 2x the capacity and performance of other portable drives.

4TB | USB 3.0 | PC, Mac

Key Advantages

- Up to 2x faster than other portable drives, up to 220MB/s
- No external power supply required
- Back up content from smart phones, tablets and computers

Best-Fit Applications

- High data traffic applications such as video editing and streaming
- Carry your entire digital library with you on the go
- Portable design, completely bus powered
- Mobile device backup



PRODUCT DIMENSIONS	4.602-in L x 3.248-in W x 0.880-in D (116.90mm x 82.50mm x 22.35mm)
PACKAGE DIMENSIONS	5.787-in L x 5.236-in W x 1.850-in D (147mm x 133mm x 47mm)



Expansion Portable

The Expansion Portable Drive is compact and perfect for taking large files with you on the go.

500GB – 4TB | USB 3.0 | PC

Key Advantages

- Simple and straightforward setup
- Powered from the USB cable
- Saving files is easy—simply drag and drop
- USB 3.0 interface allows fast transfer speeds

Best-Fit Applications

- Instantly add more storage space to your computer
- Take large files with you when you travel



PRODUCT DIMENSIONS (500GB – 2TB)	4.61-in L x 3.15-in W x 0.58-in D (117mm x 80mm x 14.8mm)
PRODUCT DIMENSIONS (3TB, 4TB)	4.61-in L x 3.15-in W x 0.82-in D (117mm x 80mm x 20.8mm)
PACKAGE DIMENSIONS	5.51-in L x 4.06-in W x 1.22-in D (140mm x 103mm x 31mm)

Game Drive for Xbox

Boost your console's storage capacity with the Seagate Game Drive, the only external hard drive designed exclusively for Xbox.

2TB – 4TB | USB 3.0 | Xbox One, Xbox 360

Key Advantages

- Up to 4TB capacity lets you store 100+ Xbox One games
- Plug-and-play setup gets you up and playing in seconds
- Compact size and no power cable means it's perfect for your living room or to take to a friend's house

Best-Fit Applications

- Instant, easy game storage upgrade for your Xbox console
- Storage for more games, and portability of your game library

PRODUCT DIMENSIONS (2TB)	4.61-in L x 3.15-in W x 0.58-in D (117mm x 80mm x 14.8mm)
PRODUCT DIMENSIONS (4TB)	4.61-in L x 3.15-in W x 0.82-in D (117mm x 80mm x 20.8mm)
PACKAGE DIMENSIONS	7.22-in L x 5.45-in W x 1.57-in D (183.5mm x 138.5mm x 40mm)

Seven^{mm}

The Seven Portable Drive exemplifies advanced storage R&D with world-class industrial design to create the slimmest way to carry 500GB of data.

500GB | USB 3.0 | PC, Mac

Key Advantages

- Celebrates over 35 years of storage expertise and innovation at only 7mm slim
- Seagate's most advanced 5mm drive technology
- Precision-crafted, super-thin 100% stainless steel enclosure
- Stylish, premium braided USB 3.0 cable
- Compatible with Windows and Mac without setup or installation

Best-Fit Applications

- Elegant and stylish data storage
- Rugged, ultra-portable storage for photo, movies, music and documents
- Mobile device backup
- Cross-platform Windows and Mac file transfer



PRODUCT DIMENSIONS	0.276-in L x 3.228-in W x 4.823-in D (7mm x 82mm x 122.5mm)
PACKAGE DIMENSIONS	0.866-in L x 6.024-in W x 6.024-in D (22mm x 153mm x 153mm)

Innov8^{TB}

With Innov8 desktop storage powered by USB-C, boundaries are now off limits.

8TB | USB 3.0 | PC, Mac

Key Advantages

- 8TB of USB-C powered external desktop storage
- A single, reversible USB-C cable provides both power and access to your content
- Premium all-aluminum enclosure that is sturdy and well-balanced

Best-Fit Applications

- Reliable access to all your important files
- No need for an extra power source or adapter
- Horizontal or vertical placement



PRODUCT DIMENSIONS	8.189-in L x 4.866-in W x 1.417-in D (208mm x 123.6mm x 36mm)
PACKAGE DIMENSIONS	10.63-in L x 6.89-in W x 2.756-in D (270mm x 175mm x 70mm)

Expansion Desktop

The Expansion Desktop Drive provides extra storage for your ever-growing collection of files.

2TB – 5TB | USB 3.0 | PC

Key Advantages

- Simple and straightforward setup
- No software to install and nothing to configure
- Saving files is easy—simply drag and drop
- USB 3.0 interface allows fast transfer speeds

Best-Fit Applications

- Instantly add more storage space to your computer
- Improve performance on your computer's internal drive by freeing up space on your internal drive



PRODUCT DIMENSIONS	6.93-in L x 4.75-in W x 1.44-in D (176mm x 120.60mm x 36.60mm)
PACKAGE DIMENSIONS	8.58-in L x 8.35-in W x 2.68-in D (218mm x 212mm x 68mm)



Backup Plus Desktop

The Backup Plus Desktop Drive is the simple, one-click way to protect and share your entire digital life.

3TB – 4TB | USB 3.0 | PC, Mac

Key Advantages

- Easy, flexible backups
- Back up photos and videos from smart phones and tablets
- Automatically saves photos from social networks
- Photos and videos can be shared to social networks with a click

Best-Fit Applications

- Store or back up photos, movies, music and documents.
- Mobile device backup
- Download and save content that's posted on your social networks



PRODUCT DIMENSIONS	4.646-in L x 1.445-in W x 7.409-in D (118mm x 36.7mm x 188.2mm)
PACKAGE DIMENSIONS	8.78-in L x 9.134-in W x 2.756-in D (223mm x 232mm x 70mm)

Backup Plus Hub

The Backup Plus Hub provides one-stop storage with integrated USB 3.0 hub to manage and charge your devices.

4TB – 8TB | USB 3.0 | PC, Mac

Key Advantages

- Back up photos and videos from smartphones and tablets
- Two front-facing USB 3.0 ports allow you to charge and connect external devices
- Cross-platform compatibility
- Share photos and video to social networks with a click

Best-Fit Applications

- Mobile device backup
- Back up all your important files
- Download and save content that's posted on your social networks



PRODUCT DIMENSIONS	4.646-in L x 1.614-in W x 7.799-in D (118mm x 41mm x 198.1mm)
PACKAGE DIMENSIONS	8.78-in L x 9.134-in W x 2.756-in D (223mm x 232mm x 70mm)



Backup Plus Hub for Mac

The Backup Plus Hub for Mac offers Time Machine-ready backup with integrated USB 3.0 hub to manage and charge your devices.

4TB – 8TB | USB 3.0 | PC, Mac

Key Advantages

- Back up photos and videos from smartphones and tablets
- Mac OS and Time Machine ready right out of the box
- Two front-facing USB 3.0 ports allow you to charge and connect external devices
- Cross-platform compatibility

Best-Fit Applications

- Mobile device backup
- Back up all your important files
- Download and save content that's posted on your social networks
- Share your digital memories to your social networks with a click.



PRODUCT DIMENSIONS	7.799-in L x 1.614-in W x 4.646-in D (198.1mm x 41mm x 118mm)
PACKAGE DIMENSIONS	9.134-in L x 8.78-in W x 2.756-in D (223mm x 232mm x 70mm)

CASE STUDY

Using Data to Save Endangered Species

The Wildlife Conservation Network (WCN) draws on human ingenuity and technology to combat threats to endangered species. Partnering with Seagate, WCN and its partners are using leading-edge data storage and cloud technologies to help save endangered animals and their habitats.



Storing Data, Sharing Knowledge

The core work of WCN is done by its entrepreneurial partners in the field. The ability to quickly share data, best practices and knowledge among teams is critical to enhancing cross collaboration. WCN partner organizations, like the Snow Leopard Conservancy, often work in remote areas, and the video, photos and other data collected through camera traps is very costly to capture and virtually impossible to replace if lost.

Seagate donates technology solutions to help field teams secure video, photos and other vital data captured in some of the most isolated, inhospitable areas of the world. Teams can then transport and back up the data, have it reliably available for analysis, and then share it with other conservation organizations. This irreplaceable data provides valuable insights about the habits of endangered species and ultimately contributes to their conservation.

How We Did It



In the Field

Field teams needed reliable, portable storage to transport and back up photos, files and data in harsh, rugged environments. Seagate's Backup Plus Slim portable drives were up for the challenge.



At WCN Headquarters

To support WCN's amazing growth and collaborative work model, they needed to back up files efficiently and retire old, outdated equipment. We deployed Seagate 16TB 4-Bay NAS Business Storage (BNAS).



Around the World

To provide field teams with reliable, consistent access to the data that is crucial to their work and add a layer of protection, we added the Seagate EVault Cloud Service, which seamlessly integrates with the on-site BNAS.

See how you can help. Get involved or donate at www.wildnet.org



Stream

Seagate offers two versions of compelling portable drives in a variety of high capacities that can stream your content wirelessly. No wires, no Web. Bring along hundreds of movies and thousands of songs, photos and files to stream to your tablet or smartphone—anytime, anywhere. When streaming wirelessly, consumers don't have to worry about maxing out the capacity of their favorite device or their data usage plan.

	Wireless Plus	Wireless
Perfect for	Mobile storage for tablets and smartphones	Mobile storage for tablets and smartphones
Capacity	2TB, 1TB, 500GB	500GB
Interface	WiFi and USB 3.0	WiFi and USB 2.0
Compatible Platform	PC, Mac, Android, iOS, Kindle	PC, Mac, Android, iOS, Kindle
Simultaneous Device Streaming	Up to 8	Up to 3

Wireless

With Wireless Mobile Device Storage, you can stream your media and access your files without wires or the Internet.

500GB | USB 2.0 | PC, Mac, Mobile Devices

Key Advantages

- Take your media library with you on the go
- Share media with up to three Wi-Fi enabled devices at the same time
- Use anywhere, without an Internet connection

Best-Fit Applications

- Store and carry movies and other media on the go
- Share media with others



PRODUCT DIMENSIONS 4.94-in L x 4.93-in W x 0.965-in D (125.36mm x 125.36mm x 24.5mm)

PACKAGE DIMENSIONS 6.02-in L x 2.0-in W x 6.54-in D (153mm x 51mm x 166mm)

Wireless Plus

With Wireless Plus Mobile Device Storage, you can enjoy your media and access your files without wires or the Web.

500GB – 2TB | USB 3.0 | PC, Mac, Mobile Devices

Key Advantages

- Synchronize your Dropbox and Google Drive folders to Wireless Plus
- Take your media library with you on the go
- Share media with up to eight Wi-Fi enabled devices at the same time
- Use anywhere, without an Internet connection
- Up to 10 hours battery life

Best-Fit Applications

- Store and carry movies and other media on the go
- Share media with others
- Works with iOS and Android smartphones and tablets, Amazon Kindle Fire tablets and Windows 8 PCs and tablets



PRODUCT DIMENSIONS 5.00-in L x 3.50-in W x 0.8-in D (127mm x 89mm x 21mm)

PACKAGE DIMENSIONS 6.02-in L x 2.0-in W x 7.16-in D (153mm x 51mm x 182mm)



Share

Customers are looking for lots of capacity and a cool, secure place to load and store all of their favorite music and movies along with a lifetime of photos. Wherever there is an Internet connection, there is always a way back home to a Personal Cloud. Stream and share all content to top-selling Smart TVs and mobile devices.

Personal Cloud	
Perfect for	Home media storage
Number of Drives	1 drive
Capacities	5TB, 4TB, 3TB
Features	<ul style="list-style-type: none"> • Automatic backup for PC, Mac and mobile devices • Streams media to Samsung TV, Apple TV, Roku, LG TVs, Chromecast, or DLNA • Remotely access files from PC or Mac with Sdrive™ software and from mobile devices with the Seagate Media App

Personal Cloud

Personal Cloud Home Media Storage allows you to create your very own cloud that is accessible outside the home.

3TB – 5TB | GigE | PC, Mac, Mobile Devices

Key Advantages

- Centralized backup for multiple computers
- Stream your media library to gaming consoles, media players and smart TVs
- Access your files on-the-go from computers, tablets and smartphones

Best-Fit Applications

- Consolidate content on one easily accessible device
- Secure remote access from any computer mobile device
- Share with anyone and any device in a connected home



PERSONAL CLOUD	
PRODUCT DIMENSIONS	5.7-in L x 8.5-in W x 1.7-in D (145mm x 216mm x 42mm)
PACKAGE DIMENSIONS	3.15-in L x 10.3-in W x 9.25-in D (80mm x 261mm x 235mm)





Upgrade

The best reason to upgrade a drive is to increase performance. If you know gamers, you know they're always looking to edge out the competition. Upgrading the hard drive improves the overall performance of your system and may extend the life of the system itself. Seagate offers drives as upgrade kits for a number of applications. For Seagate bare drives sold separately, refer to the Internal/Speciality section.

	Laptop SSHD Retail Kit	Laptop HDD Retail Kit	Game Drive for PlayStation (SSHD)	Game Drive for PlayStation (HDD)	Desktop SSHD Retail Kit	Desktop HDD Retail Kit
Perfect for	Performance laptop, gaming laptop	Standard or thin laptop	Capacity and performance upgrade	Maximum capacity upgrade	Performance and gaming desktop	Desktop computer
Capacity	1TB	2TB, 1TB, 500GB	1TB	2TB	4TB, 2TB	6TB, 5TB, 4TB, 3TB, 2TB, 1TB, 500GB
Performance	Up to 4x faster than standard laptop hard drive	Excellent performance	Faster boots and loads, 25+ game capacity	50+ game capacity	Up to 5x faster than standard desktop hard drive	Excellent performance
Key Feature	Faster boot time	Encryption	Faster boot and game load time	Maximum game storage capacity	Faster boot time	DiskWizard™ software
Form Factor	2.5-inch	2.5-inch	2.5-inch	2.5-inch	3.5-inch	3.5-inch
z-Height	9.5mm	9mm, 7mm	9mm	9mm	—	—
Warranty, Limited	5 years	2 years	5 years	2 years	5 years	2 years

Laptop SSHD Retail Kit

Boot faster. Load faster. Shoot faster.

1TB | SATA 6Gb/s | 9.5mm

Key Advantages

- Experience the speed you need with 32GB and 8GB NAND flash options
- Easy laptop upgrade saves time and improves productivity
- Hybrid drives fuse the blazing speed of SSD with the high capacity of a hard drive
- Performs up to 5x faster than a traditional 7200-RPM HDD
- Thin 9.5mm drive for mobile devices
- Seagate Secure™ Self-Encrypting Drive (SED) options
- 5-year limited warranty



Best-Fit Applications

- Laptops, desktops, ultrabooks and tablets
- High-performance gaming systems
- Small form factor all-in-one PCs

Laptop HDD Retail Kit

Feature-rich, slim, lightweight style at price and capacity points that enable no-compromise designs for thin computing

500GB – 2TB | SATA 6Gb/s | 9.5mm

Key Advantages

- 9.5mm, 2.5-inch hard drive for your laptop and electronic devices
- Compatible with SATA 6Gb/s and 3Gb/s designs
- Backed by a 2-year limited warranty



Best-Fit Applications

- Traditional laptops
- Small form factor PCs
- Convertible and detachable storage
- Slim consumer electronics devices



Game Drive for PlayStation®

PlayStation internal hard drive upgrade with flash SSD performance and HDD capacity

1TB | SATA 6Gb/s | 9.5mm

Key Advantages

- Upgrade your PlayStation for higher capacity and better performance
- Store 25+ PS4 games on 1TB of storage
- Boot and load quicker thanks to NAND flash storage and Seagate Adaptive Memory™ technology
- Get up and running fast with easy installation and configuration—without voiding your PlayStation warranty



Best-Fit Applications

- PlayStation 3 or PlayStation 4 video game consoles



Desktop SSHD Retail Kit

Solid state hybrid drives deliver speed and capacity for gaming and high-performance desktop applications.

2TB, 4TB | SATA 6Gb/s | 64MB Cache | 8GB MLC Flash

Key Advantages

- For a richer gaming experience, Seagate SSHDs deliver faster map load speed for non-stop performance and play
- Get the kick of an integrated solid state drive (SSD) with the massive 4TB capacity of a hard drive—all at a surprisingly low price!
- Boots Windows 8 in less than 10 seconds
- Performs up to 5x faster than 7200 RPM desktop hard drives
- Improves overall system responsiveness by 30% or more
- 5-year limited warranty



Best-Fit Applications

- Desktop PCs
- Workstations
- High-performance direct-attached storage (DAS) devices

Game Drive for PlayStation®

High-capacity internal HDD upgrade for PlayStation 3™ or PlayStation 4™

2TB | SATA 6Gb/s | 9.5mm

Key Advantages

- Upgrade the stock hard drive in your PS3 or PS4
- Store 50+ PS4 games on 2TB of storage
- Keep your favorite games, downloadable content and a massive multimedia library
- Get up and running fast with easy installation and configuration—without voiding your PlayStation warranty



Best-Fit Applications

- PlayStation 3 or PlayStation 4 video game consoles

Desktop HDD Retail Kit

The one drive for every desktop system need, supported by 30 years of trusted performance, reliability and simplicity

500GB – 6TB | SATA 6Gb/s | 16MB – 256MB Cache

Key Advantages

- Store as much desktop data as you need with multiple capacities up to 6TB
- Store data faster with SATA 6Gb/s interface that optimizes burst performance
- Rest easy knowing your drive delivers dependable performance with Seagate AcuTrac™ servo technology
- Have confidence with safe, fast and easy drive retirement provided by Instant Secure Erase feature
- Protect your data with Seagate Secure™ models



Best-Fit Applications




- Desktop systems
- All-in-one PCs
- Entry-level home servers



THE GUARDIAN SERIES

Internal/Specialty Products

The future of data storage is here. Seagate introduces the industry's broadest portfolio of 10TB hard drives. The Guardian Series delivers industry-leading technology that raises the bar on features, speed and capacity across multiple storage markets, including personal compute, gaming, small- and medium-sized businesses, and large-scale surveillance systems.

 BARRACUDA <small>COMPUTE</small>	 IRONWOLF <small>NAS</small>	 SKYHAWK <small>SURVEILLANCE</small>
Versatile, Fast, Dependable	Tough, Ready, Scalable	Smart, Safe, Secure
BarraCuda® BarraCuda Pro FireCuda™	IronWolf™ IronWolf Pro	SkyHawk™
Laptop Computing Desktop Computing PC Gaming Creative Pro Applications	Network-Attached Storage Devices (NAS) SMB/SME Companies	Surveillance DVR Surveillance NVR



BarraCuda®

BarraCuda offers the utmost in versatility and dependability with multiple storage capacities for every personal computer in your home or business.

3.5-in: 500GB – 4TB¹ | SATA 6Gb/s | 32MB to 64MB Cache

2.5-in: 500GB – 5TB¹ | SATA 6Gb/s | 128MB Cache

Key Advantages

- Seagate 3.5-inch hard drives lead the market with the widest range of storage options available, in capacities as large as 4TB
- Seagate 2.5-inch hard drives are the slimmest, highest-capacity mobile drives on the market, with a sleek 7mm form-factor and massive 2TB storage capacity. Seagate 2.5-inch drives also provide capacities from 3TB to 5TB for high-performance external storage and all-in-one PC applications



Best-Fit Applications

- Desktop PC upgrades
- All-in-one PCs
- Mobile computing upgrades
- Entry-level home servers

BarraCuda Pro

The BarraCuda Pro's lightning-fast performance and titanic storage give your PC or workstation the edge you need to be your very best.

6TB – 10TB | SATA 6Gb/s | 256MB Cache

Key Advantages

- 7200-RPM spin speeds and 220MB/s sustained transfer rate make BarraCuda Pro the fastest 10TB PC compute drive on the market
- 3.5-inch BarraCuda Pro drives are equipped with a large cache for quick loading of commonly used applications and files
- BarraCuda Pro draws a mere 6.8W, making it the lowest-power desktop 10TB drive on the market today
- BarraCuda Pro comes with a Rescue Data Recovery plan for additional peace of mind for any mechanical, accidental or natural disaster
- 5-year limited warranty



Best-Fit Applications

- PC enthusiasts
- Creative professionals
- Gamers

FireCuda™

The FireCuda is the fastest PC compute drive available, combining flash-accelerated technology with HDD storage capacities.

3.5-in: 1TB – 2TB | SATA 6Gb/s | 64MB Cache | 8GB MLC Flash

2.5-in: 500GB – 2TB | SATA 6Gb/s | 64MB Cache | 8GB MLC Flash

Key Advantages

- For a richer gaming experience, FireCuda drives deliver faster load speed than standard hard drives
- Save time with a drive that boots in seconds, not minutes
- Get in the game 5x faster than standard hard drives
- 5-year limited warranty



Best-Fit Applications

- Gaming PCs
- Workstations
- Performance PCs



IronWolf™

IronWolf is optimized to deliver agile performance for 24x7 accessible NAS systems with 1 to 8 bays.

1TB – 10TB | SATA 6Gb/s | Up to 256MB Cache

Key Advantages

- AgileArray™ optimizes the HDD for NAS with dual-plane balance with rotational vibration (RV) sensors¹, RAID optimization, and power management
- Error recovery control helps drives comply with NAS server requirements for better data integrity, ensuring it remains active in a RAID environment
- Advanced power provides low power options for always-on NAS applications
- Multi-User Technology providing 180TB/yr user workload rate
- 3-year limited warranty
- Available with optional Rescue Data Recovery Services plan

¹ RV sensor available on 4, 6, 8 and 10TB IronWolf



Best-Fit Applications

- 1- to 8-bay network-attached storage (NAS)
- Multimedia server
- Backup, archiving and disaster recovery

IronWolf Pro

IronWolf Pro is optimized for business NAS to deliver agile performance for 24x7 accessible NAS systems with 1 to 16 bays.

1TB – 10TB | SATA 6Gb/s | Up to 256MB Cache

Key Advantages

- AgileArray™ optimizes the HDD for NAS with dual-plane balance with RV sensors, RAID optimization, and power management
- Error recovery control helps drives comply with NAS server requirements for better data integrity
- Advanced power provides low power options for always-on NAS applications
- Multi-User Technology providing 300TB/yr user workload rate
- 2-year Rescue Data Recovery Services plan included
- 5-year limited warranty



Best-Fit Applications

- 1- to 16-bay business network-attached storage (NAS)
- Backup, archiving and disaster recovery
- On-premise private cloud
- Virtual storage



SkyHawk™

Keep your business or home secure with SkyHawk surveillance hard drives, tuned for 24x7 surveillance workloads. ImagePerfect™ firmware is optimized for capturing HD video from up to 64 cameras. Minimize dropped frames and downtime with SkyHawk surveillance storage.

1TB – 10TB¹ | SATA 6Gb/s | Up to 256MB Cache

Key Advantages

- NVR-ready to record from up to 64 cameras per drive 24x7 in high definition for always-on performance
- 3x the workload rating of desktop and competitive offerings allows SkyHawk to perform reliably over time
- Up to 10TB or 2,000 hours of HD video recording
- Optimized for low power consumption to support low system design costs
- 1M hours MTBF, 3-year limited warranty, OSP tarnish-resistant components offer extra protection against the elements
- Optional 3-year Rescue Recovery Service Plan



Best-Fit Applications

- Network video recorder (NVR)
- Embedded SDVR
- Hybrid SDVR
- Surveillance DVR

Enterprise/Data Center Products

Seagate is innovating storage to meet the ever-changing dynamics of IT, enabling our customers to remain competitive and relevant. In addition, Seagate products effectively help solve storage issues within high-performance computing (HPC), transaction processing, cloud content storage, bulk data applications, object-based applications and cold storage applications.



HDD

Maximize your storage efficiency with high capacity and performance

Enterprise Capacity 3.5 HDD (Helium)

Enterprise Capacity 3.5 HDD

Archive HDD

Enterprise NAS HDD

Terascale® HDD

Enterprise Capacity 2.5 HDD

Kinetic HDD

Enterprise Performance 15K HDD

Enterprise Performance 10K HDD

High-Performance Computing

Big Data Analytics

Content Storage

Cloud Hyperscale



SSD

Improve speed, density and TCO in data centers

1200.2 SAS SSD

Nytró® XF1230 SATA SSD

Nytró XF1440/XM1440 NVMe SSDs

Nytró XP7102 NVMe Add-In Card

Nytró XP7200 NVMe Add-In Card

IOPS-Hungry Enterprise

All-Flash Arrays

Cloud Computing

High-Performance Database



HDD

For content storage, cloud hyperscale and object-based storage applications, customers need massive nearline storage for bulk data that is always on and accessible. Customers also can take advantage of a Helium-based HDD or an Ethernet-based drive that implements the latest technology to help customers design systems that reduce TCO and enable flexibility in response to a growing cloud storage infrastructure. For mission-critical applications in traditional enterprise data centers, our 24x7 HDDs offer cost-effective efficiencies.

	Enterprise Capacity 3.5 HDD (Helium)	Enterprise Capacity 3.5 HDD	Archive HDD	Enterprise NAS HDD
Perfect for	High-density new cloud data center build-outs for lowest TCO	High-capacity storage, massive scale-out architectures	Online archiving, big data, cold storage	Small to medium enterprise business
Capacity	10TB	8TB, 6TB, 5TB, 4TB, 3TB, 2TB, 1TB	8TB, 6TB	8TB, 6TB, 5TB, 4TB, 3TB, 2TB
Interface	SATA 6Gb/s, 12Gb/s SAS	SATA 6Gb/s, 12Gb/s SAS	SATA 6Gb/s	SATA 6Gb/s
Performance (SDR)	249MB/s	249MB/s	190MB/s	230MB/s
Key Feature	Lowest power and lowest weight	Reliably high performance, Encryption	Lowest cost per TB	300TB/year workload rating
Reliability	2.5M hours MTBF	2M hours MTBF	800K hours MTBF	1.2M hours MTBF
Form Factor	3.5-inch	3.5-inch	3.5-inch	3.5-inch
Servers	Yes	Yes	—	—
RAID Storage	Yes	Yes	—	Yes
Object-Based Storage	Yes	Yes	Yes	—
JBOD	Yes	Yes	Yes	Yes
Warranty, Limited	5 years	5 years	3 years	5 years

Terascale® HDD	Enterprise Capacity 2.5 HDD	Kinetic HDD	Enterprise Performance 15K HDD	Enterprise Performance 10K HDD
Web-scale data center storage	High density, small footprint	Scale-out object storage	Database, online search, high performance RAID	File servers, email servers, mid-tier RAID
4TB	2TB, 1TB	4TB	900GB, 600GB, 300GB	1.8TB, 1.2TB, 900GB, 600GB
SATA 6Gb/s	SATA 6Gb/s, 12Gb/s SAS	Ethernet	12Gb/s SAS	12Gb/s SAS
170MB/s	136MB/s	—	315MB/s	241MB/s
Seagate Instant Secure Erase option	Encryption	Simplifies cloud storage infrastructure	Fast Format™ option, Enhanced Cache	TurboBoost™ read caching
800K hours MTBF	2M hours MTBF	800K hours MTBF	2M hours MTBF	2M hours MTBF
3.5-inch	2.5-inch	3.5-inch	2.5-inch	2.5-inch
Yes	Yes	Yes	Yes	Yes
Yes	Yes	—	Yes	Yes
Yes	—	Yes	—	—
Yes	Yes	Yes	—	—
3 years	5 years	3 years	5 years	5 years



Enterprise Capacity 3.5 HDD (Helium)

Maximum storage capacity for highest rack space efficiency

10TB | SATA 6Gb/s, 12Gb/s SAS | 256MB Cache

Key Advantages

- Most efficient TCO with industry's lowest power and weight, and highest performance and density
- Superior wide weld design for a more robust, hermetically sealed-drive enclosure that protects from helium leaks
- Digital environmental sensors for measuring humidity, pressure and temperature to ensure high reliability, performance and quality
- Latest hermetic interconnect technology supporting higher data rate heads and higher pin counts for extreme thermal conditions
- PowerBalance™ feature optimizes IOPS/watt
- Advanced Write Caching feature for up to a 20% boost in random write performance (compared to last-generation competitive 8TB product)
- Proven enterprise-class reliability backed by 2.5M-hour MTBF



Best-Fit Applications

- Hyperscale applications/cloud data centers
- Massive scale-out data centers and big data analytics
- High-capacity density RAID storage
- Mainstream enterprise external storage arrays
- Distributed file systems, including Hadoop and Ceph
- Enterprise backup and restore—D2D, virtual tape
- Centralized surveillance

Enterprise Capacity 3.5 HDD

The Seagate Enterprise Capacity 3.5 HDDs help both private and public data centers meet the demanding growth of unstructured data.

1TB – 8TB | SATA 6Gb/s, 12Gb/s SAS | 256MB Cache

Key Advantages

- High-capacity enterprise drive for maximum density server and storage solutions
- Engineered for 24x7 workloads of 550TB/yr
- Predictable 7200-RPM performance even in the most challenging multi-drive environments
- Improved power and cooling efficiencies with low power consumption and on-demand PowerChoice™ technology
- Protect your data and ease data disposal costs and management with the Self-Encrypting Drive (SED) and FIPS 140-2 certified SED
- 2M-hour MTBF



Best-Fit Applications

- Massive scale-out storage environments
- High-density data centers
- Mainstream enterprise external storage (SAN, NAS, DAS)
- Cloud bulk data storage
- Enterprise backup and restore—D2D, virtual tape
- Centralized surveillance
- High-density NAS/SAN solutions





Archive HDD

Affordable active archive hard drives for cloud storage

6TB – 8TB | SATA 6Gb/s | 128MB Cache

Key Advantages

- Efficiently store more data at lower costs with this low cost/GB/watt hard drive
- Enjoy peace a mind with a drive engineered for 24x7 workloads of 180TB per year
- Keep your costs down with up to 1.33TB-per-disk hard drive technology
- Store your data faster with SATA 6Gb/s interface that optimizes burst performance
- Have confidence with a drive that provides reliable, low-power data retrieval based on shingled magnetic recording (SMR) technology



Best-Fit Applications

- Online archiving
- Large data object storage
- Big data cold storage
- Cloud active archive
- Web-scale archiving

Enterprise NAS HDD

Designed to combine up to 8TB of industry-leading capacity with reliability and performance for SMB and private cloud NAS and RAID storage systems with up to 16 bays

2TB – 8TB | SATA 6Gb/s | Up to 256MB Cache

Key Advantages

- NAS-optimized performance for higher write workloads often reflected in NAS applications
- RAID Rebuild™ technology speeds up time-consuming complete RAID rebuilds
- Specifically designed to minimize rotational vibration (RV) effects typically found in multi-drive solutions, improving system performance and reliability
- Extended error recovery controls help to ensure drives comply with NAS system requirements for better data integrity
- 5-year limited warranty so you can rest easy with your drive choice
- Available with Rescue Data Recovery Services plan



Best-Fit Applications

- Backup and disaster recovery
- Multimedia server and storage
- Archiving and cloud replication
- On-premise private cloud



Terascale® HDD

Store more data with up to 4TB of storage for 24x7 multi-drive replicated environments.

4TB | SATA 6Gb/s | 64MB Cache

Key Advantages

- Enjoy peace of mind with a reliable enterprise-class performing drive that includes high vibration tolerance
- Save money with a power efficient drive that minimizes power and cooling costs
- Rest easy knowing your data integrity is maintained through Advanced Format logical block management
- Store your data faster through SATA 6Gb/s interface that optimizes burst performance



Best-Fit Applications

- Web-scale computing
- Cloud storage servers and arrays
- Cloud backup storage
- Direct-attached external storage (DAS)
- Network-attached storage (NAS)

Enterprise Capacity 2.5 HDD

Store large amounts of data without using a ton of space with up to 2TB in storage on a 2.5-inch form factor.

250GB – 2TB | SATA 6Gb/s, 12Gb/s SAS | 128MB Cache

Key Advantages

- Quickly access high-integrity data in a secure manner with either 12Gb/s SAS or SATA 6Gb/s
- Enjoy peace of mind with this third-generation drive delivering enterprise-class reliability for 24x7 environmental robustness
- Lower your power costs and store data faster with over 50% improvement in watts/TB and 18% sequential performance improvement compared to the previous generation
- Rest easy with maximum system availability and drive performance as a result of improved rotational vibration tolerance and head micro-actuation



Best-Fit Applications

- Storage-hungry business applications
- Storage area networks and network-attached storage
- Maximum-capacity servers and blade servers
- Rich media content storage
- Enterprise backup and restore—D2D, virtual tape
- Cloud computing



Kinetic HDD

The Kinetic HDD is the first Ethernet-connected HDD with an open source object API designed for hyperscale and scale-out environments.

4TB | Ethernet | 64MB Cache

Key Advantages

- Reduces TCO by simplifying cloud and data center storage hardware and software stacks
- Improves performance by eliminating layers of antiquated file system software
- Enables flexible and independent scaling of compute and storage growth
- Supports hyperscale 24x7 environments with up to 800 drives in a 40U rack
- Connects storage directly to existing data center data communications fabric



Best-Fit Applications

- Object data storage
- Hyperscale and scale-out storage
- Cloud storage arrays
- Cloud backup storage

Enterprise Performance 10K HDD

Perfect balance of high capacity and high performance

600GB – 1.8TB | 12Gb/s SAS | 128MB Cache

Key Advantages

- Complete more transactions faster with TurboBoost™ enhanced cache
- Low power that data centers need to reduce IT operating costs
- Future-proof with 12Gb/s SAS and Advanced Format options
- Protect data with Self-Encrypting Drive (SED) models



Best-Fit Applications

- Mission-critical servers and external storage arrays
- Power- and space-constrained data centers
- Green IT and drive-retirement cost reduction initiatives
- Compliance or data security initiatives

Enterprise Performance 15K HDD

Improve your server response times.

300GB, 600GB, 900GB | 12Gb/s SAS | 256MB Cache

Key Advantages

- Complete more transactions in less time with Enhanced Cache feature
- Fast Format™ feature for interface simplification
- Seagate Secure™ drives with Instant Secure Erase for easy disposal
- Protect data with Self-Encrypting Drive (SED) models



Best-Fit Applications

- High-performance Tier 1 enterprise servers
- Blade, rack and tower servers hosting transaction-based applications
- Power- and space-constrained data centers
- Compliance and data security initiatives



CASE STUDY

Seagate gives CERN space to accelerate their research

CERN, the European Organization for Nuclear Research, is the world's largest particle physics laboratory and home to the Large Hadron Collider (LHC), the world's most advanced and powerful particle accelerator.



What do you need to unlock the secrets of the universe?

“CERN creates a truly astonishing amount of data on a daily basis, and finding secure and efficient ways to store that information is one of the most important challenges we face.”

– Alberto Di Meglio,
Head of CERN openlab

At CERN, physicists and engineers are probing the fundamental structure of the universe. They use the world's largest and most complex scientific instruments to study the basic constituents of matter—the fundamental particles. The particles are made to collide together at close to the speed of light. This process gives the physicists clues about how the particles interact, and provides insights into the fundamental laws of nature. It also produces a vast amount of data!

Making progress at the rate of three petabytes a month

The technical power needed to capture and crunch data at the world's leading particle physics laboratory is huge! Probing the fundamental structure of the universe—using the most complex scientific instruments—generates a phenomenal amount of data. CERN has collected well over a hundred petabytes of data to date, and continues to collect an additional two to three petabytes of information every month.

But it's not just about data—it's about data intelligence

Seagate has entered into a three-year collaboration with CERN openlab to develop the Seagate Kinetic Open Storage platform. This collaboration aims to help CERN improve its data storage processes, and is key to the organization's ongoing success in gathering and evaluating the huge amount of data the Large Hadron Collider has generated to date.

Results

- 3-year partnership between Seagate and CERN
- Demonstrate improved performance at 15%-40% lower TCO
- Second future research project with Seagate and CERN to assess CERN's EOS storage system

For more information about the collaboration, visit seagate.com/promos/spaceforeverything/cern/



SSD

With a lineup of products that ranges from PCIe-based solid state drives and add-in cards for hyperconverged, open source and cloud deployments, to SATA and SAS solid state drives for demanding database and virtual environments. Seagate provides the processing power for mission-critical applications like high-performance computing, big data analytics and transaction processing.

	1200.2 SAS SSD	Nytro® XF1230 SATA SSD	Nytro XF1440/ XM1440 NVMe SSDs	Nytro XP7102 NVMe Add-In Card	Nytro XP7200 NVMe Add-In Card
Perfect for	Complex, IOPS-hungry enterprise applications, all flash arrays	Cloud, read-intensive workloads, all flash arrays	Dense environments, virtualization, cloud, all flash arrays	Dense environments, cloud, databases	HPC, big data analytics, databases, cloud
Capacity	3.84TB, 3.2TB, 1.92TB, 1.6TB, 960GB, 800GB, 480GB, 400GB, 200GB	1.92TB, 960GB, 480GB, 240GB	1.92TB, 1.6TB, 960GB, 800GB, 480GB, 400GB	1.6TB, 800GB	7.7TB, 3.8TB
Interface	SAS 12Gb/s	SATA 6Gb/s	PCIe Gen3 x4, NVMe 1.2a	PCIe Gen3 x4, NVMe 1.2a	PCIe Gen3 x16 NVMe 1.2a
Form Factor	2.5-inch	2.5-inch	2.5-inch and M.2	Half height, half length	Full height, half length
Use in Servers	Yes	Yes	Yes	Yes	Yes
Use in Storage Arrays	Yes	Yes	Yes	—	—

1200.2 SAS SSD

The Seagate 1200.2 SAS SSD delivers best-in-class performance and a rich enterprise feature set for demanding data center applications.

200GB – 3.84TB | SAS 12Gb/s | eMLC Flash

Key Advantages

- Helps remove storage bottlenecks and close the gap between processor and data access performance
- Delivers the speed and performance consistency needed for demanding enterprise applications
- Improves ROI by leveraging existing SAS servers, accommodating SAS infrastructure scalability, and a proven SCSI command set
- Features power loss data protection to save data/operations in process
- Ensures data availability for critical production systems by using redundant, failover I/O communication paths
- Endurance options to match the needs of a wide range of enterprise workloads



Best-Fit Applications

- IOPS-hungry enterprise applications
- Server virtualization
- High-performance databases
- Software-defined storage
- External enterprise storage solutions (SAN, NAS, DAS)
- Video post-production

Nytro® XF1230 SATA SSD

Improve storage performance and reliability for cloud servers and read-centric applications without requiring upgrades to infrastructure.

240GB – 1.92TB | SATA 6Gb/s | eMLC Flash

Key Advantages

- Easy deployment in legacy storage infrastructures with SATA 6Gb/s interface
- Consistent IOPS performance with low latency for faster random access
- Power-optimized for active workloads with less than 4.8W power consumption
- Reduced TCO thanks to lower power and cooling costs
- Enhanced enterprise reliability and data protection



Best-Fit Applications

- Public and private cloud
- Data analytics
- Web servers
- Databases
- VDI
- Boot applications



Nytro® XP7102 NVMe Add-In Card

The Nytro XP7102 NVMe Add-In Card lets you drive up your data center's efficiency while dialing down upgrade costs and TCO.

800GB – 1.6TB | PCIe Gen3 x4 | MLC Flash

Key Advantages

- 5x the bandwidth of SATA SSDs thanks to PCIe Gen3 x4 interface and NVMe protocol
- 30K IOPS/W for more computing, less energy consumption
- Reduced TCO thanks to lower power and cooling costs
- Upgrade existing equipment without requiring infrastructure upgrades
- Optimized for read-intensive and mixed workloads
- Outstanding enterprise reliability and data protection
- Bootable solution via PCIe interface



Best-Fit Applications

- High-performance computing
- Big data analytics
- Databases
- Public/private cloud

Nytro® XF1440/XM1440 NVMe SSDs

Nytro XF1440 and XM1440 SSDs can help upgrade your data center's performance and storage density while driving down operating costs.

400GB – 1.92TB | PCIe Gen3 x4 | eMLC Flash

Key Advantages

- Industry-leading storage density of up to 1.92TB in both 2.5-inch x 7mm and M.2 form factors
- 5x the bandwidth of SATA SSDs thanks to PCIe Gen3 x4 interface with NVMe protocol
- Lower TCO with up to 66% less power usage than other NVMe SSDs
- Optimized for read-intensive and mixed workloads
- Outstanding enterprise reliability and data integrity
- Hot-swap capability for easy deployment and serviceability without downtime (2.5-inch)



Best-Fit Applications

- High-performance computing
- Virtualization
- Big data analytics
- Hot data

Nytro® XP7200 NVMe Add-In Card

Delivers optimized TCO as well as maximum capacity and performance per PCIe slot for high-performance enterprise and hyperscale applications.

3.8TB – 7.7TB | PCIe Gen3 x16 | MLC Flash

Key Advantages

- Industry's highest bandwidth of 10GB/s per PCIe slot
- Up to 8TB of raw flash capacity
- PCIe Gen3 x16 interface offers four individual PCIe Gen3 x4 volumes
- NVMe protocol for improved latency, consistent response time and high throughput
- Enhanced enterprise reliability and data protection
- OCP compliant device



Best-Fit Applications

- Demanding databases
- High-performance computing
- Big data analytics
- Open source deployments



Cloud Systems and Solutions

Seagate Cloud Systems and Solutions builds on the Seagate legacy to extend innovation from the device into the information infrastructure, onsite and in the cloud.

Cloud Systems and Solutions

Seagate Cloud Systems and Solutions builds on the Seagate legacy to extend innovation from the device into the information infrastructure, onsite and in the cloud.

High-Performance Computing Storage

High-performance computing (HPC) and big data customers who need to reliably plan, deploy and sustain maximum optimal application performance use Seagate HPC solutions. Our award-winning HPC solutions deliver the fastest time to results, with superior performance and ultra-efficient scalability.

Modular Storage Systems for OEMs

OEMs and solution integrators use the flexible, extensible, reliable and energy-efficient OneStor™ family of enclosures, controllers, and application platforms to modernize data centers and manage explosive data growth. Seagate has provided OEM customers with over 2 million enclosures and 17,000 petabytes of storage. Seagate delivers quality storage solutions trusted by some of the best known brands in IT.

Scale-Out Storage Systems

Seagate software-independent systems ensure that cloud service providers, independent software vendors, DIY organizations and system integrators can focus on their key value—software development and solution deployment—while enabling them to precisely assess, and therefore control, solution TCO and service delivery. Seagate provides the industry's most trusted open, scalable, modular components and engineered solutions that will speed time to market and boost bottom-line results.

RealStor™ Family of Hybrid and All-Flash Arrays With RealTier™ Tiering Software

The RealStor family of storage solutions solves many of today's most challenging storage problems—helping IT to improve performance, increase availability, simplify operations and reduce costs. Supporting a mixture of HDDs and SSDs, the RealStor family offers all-flash and hybrid-flash solutions for a wide range of applications and workloads. Embedded RealTier software allows customers to implement next-generation hybrid storage solutions that leverage the power of SSDs to increase storage performance. RealStor offers a range of options to boost performance no matter what the workload requirements.





Resources, Services and Support

Whether it is the Seagate Partner Program (SPP), which helps channel partners to succeed, or the Seagate in-lab recovery services and rescue plans that offer highly technical and specialized data recovery options for most media types, we want you and your customers to get the most out of Seagate storage technologies. Seagate offers an extensive range of customer service options, all backed by more than 30 years of leadership, innovation and excellence.

Partner Resources and Benefits

The Seagate Partner Program (SPP) provides access to unique resources and benefits to help channel partners secure new opportunities and grow revenue and profitability.

Exclusive features to help you grow your business:

- Marketing kits, product guides and sales cards
- Online training and brand materials
- Diagnostics and firmware updates
- Priority support and trackers for RMAs
- Regular product updates and industry news

Start reaping the rewards of SPP membership—register today at www.seagate.com/www/partners

- Complete the online form
- Click through and accept our standard agreement



Service and Support

For information regarding products and services, visit www.seagate.com/about/contact-us/technical-support

Available services include:

- Presales and Technical Support
- Global Support Services telephone numbers and business hours
- Authorized Seagate Service Centers

For information regarding Warranty Support, visit www.seagate.com/support/warranty-and-returns

For Seagate OEM and Distribution partner portal, visit www.seagate.com/partners

For Seagate reseller portal, visit www.seagate.com/partners



Data Recovery Services

Storage systems can fail in many ways due to mechanical or human error, however, the data stored on them is not necessarily lost. Data recovery is a highly technical, labor-intensive and costly process of retrieving usable data from inaccessible storage devices. Seagate Recovery Services (SRS) has full-service lab facilities that are prepared to address all failure modes using the industry's most advanced recovery technology and procedures.

SRS offers multiple solutions to recover your business and personal data from various types and brands of storage devices in a fast and cost-effective manner.

- **In-lab recovery**—Get help fast after occurrence of drive failure or data loss with complimentary 2-way shipping. The in-lab recovery is performed by a team of data-recovery experts and the data can be restored in as little as two days. And now, with the option to get your data back in the cloud, the data is accessible as soon as recovery is complete from anywhere with Internet access.
- **Recovery software**—A quick and easy process to check drive condition and recover the lost data from minor logical problems without having to ship your drive or device
- **Rescue plans**—Cost-effective and proactive way to protect against future data loss. Available in 2- and 3-year offerings at HDD point of sale. After drive purchase, plans can be purchased separately on Seagate.com and Amazon.

For information regarding Warranty Support, visit seagate.com/datarecovery

What Types of Media Can Seagate Recover Data From?

- Hard Disk Drives (all brands and interfaces)
- SSD and Flash Media
- USB/Firewire Drives
- Smartphones
- Tablets
- RAID (0, 1, 3, 4, 5, 6, 10, etc.)



Glossary

AcuTrac™

Seagate AcuTrac technology places a secondary actuator further down the suspension arm, bringing it closer to the head and therefore tightening control. The secondary nano-actuator fundamentally enables TPI improvement by directing the head more accurately to individual tracks, even at the nanometer scale.

Adaptive Memory™

Seagate Adaptive Memory technology effectively identifies the most frequently used data and stores it in the NAND flash. The results give you greatly improved boot times, application loads and overall system responsiveness. Available on SSHDs.

Advanced Write Caching

Seagate Advanced Write Caching is an enhanced cache option that helps to complete more random write transactions in less time and protects from data loss during writes.

AgileArray™

Seagate AgileArray technology is NAS-optimized for drive balance with rotational vibration (RV) sensors, RAID optimization, and advanced power management.

Battery life

Exact battery life is subject to product model, normal usage conditions and configurations.

Capacity

One gigabyte, or GB, equals one billion bytes and one terabyte, or TB, equals one trillion bytes when referring to drive capacity.

Data encryption and protection

Self-Encrypting Drives (SED) encrypt all user data using a data encryption key stored securely on the drive itself. The manner in which data is encrypted depends on the level of security implemented. Each level includes the protection capabilities of the previous levels.

- Quick and easy data erasure and sanitize features for secure drive repurposing (Seagate Instant Secure Erase, or ISE)
- Data-at-rest protection (SED). SEDs are not available in all models or countries. May require TCG-compliant host or controller support.
- Data-at-rest and tamper evidence protection (FIPS). Refer to the FIPS 140-2 Level 2 Certificate at <http://csrc.nist.gov/groups/STM/cmvp/documents/140-1/1401vend.htm> for more specific information.

(See also Seagate Secure.)

DiscWizard™

DiscWizard software lets you quickly and easily install your new hard drive. It guides you through the processes of creating and formatting partitions on your hard drive, transferring data and backing up your data.

Enhanced cache

Enhanced Cache features TurboBoost™, with on-board NAND for improved read performance—perfect for OLTP applications—and Advanced Write Caching for up to 3x the improvement in write performance.

Error recovery control (ERC)

Error recovery control helps ensure drives remain active in a RAID environment by averting unwarranted drive swaps and RAID rebuilds. ERC boosts RAID performance by flagging disks slowed by errors; it alerts RAID of the need for data reconstruction and rewrite to resolve disk errors and restore speed.

ImagePerfect™

Seagate ImagePerfect firmware enables smooth, clear video streaming for always-on surveillance environments. It enables a workload rating of 180TB/year and supports recording 90% of the time and up to 64HD camera streams.

Multi-Tier Caching Technology™

As a leader in NAND, hybrid, SMR and conventional magnetic recording technologies, Seagate applies different levels of caching and media optimization to benefit performance and capacity. Multi-Tier Caching (MTC) Technology brings the highest performance and areal density to a multitude of applications. Each Seagate product is uniquely tailored to meet the performance requirements of a specific use case with the right memory, NAND, and media type and size.

NASWorks™

Improves drive reliability with custom-built error recovery controls, power settings and vibration tolerance on Seagate NAS HDDs.

Performance

Performance is tested and varies depending on user's hardware configuration and operating system.

PowerBalance™

Seagate PowerBalance technology offers random workload power savings and best-in-class sequential performance with all the benefits of conventional technologies. By utilizing Seagate-unique firmware algorithms, PowerBalance trades off seek performance for operational power savings.

PowerChoice™

Seagate PowerChoice technology supports four customizable modes to give businesses significantly more control of power usage by allowing for up to a 54% reduction in the amount of energy used.

RAID Rebuild™

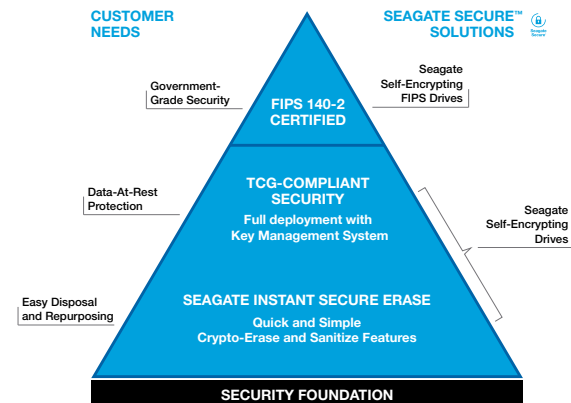
RAID Rebuild technology mitigates time-consuming complete RAID rebuilds by extracting as much data as possible from the failed drive before initiating RAID recovery.

Sdrive™

The Seagate Sdrive app is the easiest, most intuitive way to connect to your NAS if you're away from the office and need to look for or grab a file. From any desktop or laptop, access your NAS by clicking the Sdrive icon.

Seagate Secure™

With Seagate Secure drives, users securely manage data stored on their systems with no performance degradation and can securely erase all of their data, if needed, in a matter of seconds.



Sector size

A subdivision of a track on the physical disk. Hard drive companies are migrating from 512 bytes to a larger, more efficient sector size of 4096 bytes, referred to as 4K.

Secure Download & Diagnostics (SD&D)

Seagate Secure Download & Diagnostics comes standard on every Seagate Enterprise HDD. SD&D prevents unauthorized access to firmware and blocks tampering.

SimplyRAID™

Seagate's efficient and easy-to-use RAID solution. SimplyRAID technology builds in the background, allowing users to add and share files with no downtime. SimplyRAID lets you choose redundancy for one drive failure or redundancy for two drive failures.

Solid state hybrid drive (SSHD)

SSHD technology integrates a small amount of NAND flash into the HDD architecture to produce a combined benefit: the capacity of a hard drive and speed similar to an SSD assisted by Seagate Adaptive Memory technology.

TurboBoost™

An enhanced cache option that helps to complete more read transactions in less time by accelerating I/O operations.

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