

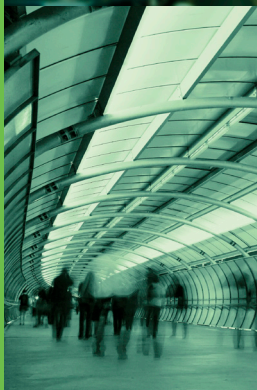


SEAGATE

# Surveillance Storage

SELECTION GUIDE

 SEAGATE | Partner Program



The amount of daily data generated by new video surveillance cameras installed worldwide in 2015 was 566 petabytes! To put it into perspective, that's equal to:

- 11.3 million standard double-layer Blu-ray movie discs
- All Netflix's current users streaming 1.2 hours of ultra-high definition content simultaneously
- Approaching twice the amount of all user data stored by Facebook

With Seagate as your partner, you can capitalize on this opportunity. Our surveillance-optimized drives are superior in every respect to desktop drives used for surveillance applications. That's critical given the demands this type of video recording puts on drives.

This guide provides the information you need to develop your expertise in surveillance storage, including an overview of the features and benefits of surveillance-optimized drives and the Seagate advantage.

## How to choose the right storage for your Video Surveillance application?

Your security can take many forms—receiving notifications when the children arrive home from school, monitoring your business over a weekend or holiday closure, overseeing visitor activity at schools, and monitoring hospital traffic flow and patterns to prepare medical teams to react faster. There are many scenarios and possibilities. But no matter where you implement these security systems, storage is essential as data is captured and analyzed 24 hours a day, 7 days a week.

Seagate offers storage to support a variety of systems; here we'll focus on those drives which support video and analytics. The applications these drives support include surveillance DVRs (SDVR), network video recorders (NVR), and centralized or cloud surveillance for video data analytics.

To choose the right drive, take the time to learn your system requirements:

- **HOW OFTEN WILL CAMERAS BE RUNNING AND RECORDING?**
- **HOW LONG DO YOU NEED TO KEEP YOUR FOOTAGE?**
- **WHERE WILL YOU BE STORING AND STREAMING YOUR DATA?**
- **HOW MANY DRIVES DOES YOUR SYSTEM SUPPORT?**

These questions will help you understand which Seagate drives will best support your system: **Surveillance HDDs or Enterprise Capacity 3.5 HDDs.**

## Hard drives: Desktop vs. Surveillance-optimized

Any surveillance system is only as strong as its weakest link. In today's video surveillance systems, drives are as essential as cameras for recording data. Because desktop drives are especially notorious for failing in surveillance environments, any data loss or corruption can be detrimental to your customers' businesses—and yours.

Desktop drives:

- are built to read and write small-block and random data transfers, not to exceed 55TB/year
- are on over a limited period of about 8 hours a day, 5 days a week
- are not designed to support high camera count
- don't support around-the-clock streaming, writing of large sequential blocks and high-definition video
- don't have rotational vibration tolerance or RAID capabilities to be used in multi-drive systems
- don't have power management and are not designed to handle heat

On the other hand, surveillance-optimized drives:

- ✓ are always on—24x7x365
- ✓ are tuned to record video 90% of the time, dedicating the other 10% to data playback and review, and support a workload rating of 180TB/year
- ✓ support smooth video streaming from multiple camera inputs
- ✓ allow reliable performance in multi-drive systems with rotational vibration tolerance and RAID support
- ✓ incorporate advanced power management capabilities

Surveillance-optimized drives are an optimal setup for video surveillance systems that require 24-hour recording, high-quality video, and long-term archival storage—the very market that offers so much opportunity.



## Improve your solutions by using Seagate Surveillance-optimized hard drives

Seagate surveillance-optimized drives are renowned for their reliability, performance, and flexibility. Our seventh-generation 1TB to 8TB Seagate Surveillance HDDs are an ideal fit for today's surveillance systems requiring high-resolution cameras and increased camera counts. Surveillance-optimized drives are essential when building scalable video surveillance systems. Our Surveillance HDDs provide many advantages over desktop drives, including:

- **SUPPORT FOR LARGE STREAMING WORKLOADS:**  
up to 64 cameras, in systems with 8+ drive bays recording 180TB/year
- **IMPROVED RELIABILITY:** up to 20% with 1M hours MTBF, plus improvements for 24x7 smooth video streaming so you never miss a frame
- **OVER 8000 HOURS OF HIGH-DEFINITION CONTENT:**  
1TB to 8TB capacity
- **IMPROVED VIBRATION TOLERANCE AND BETTER PERFORMANCE** in multi-drive and RAID-enabled systems due to rotational vibration sensors
- **24x7x365 SUPPORT:** We're there when you need us
- **OPTIONAL RESCUE DATA RECOVERY SERVICE PLAN** in the event of data loss or accident
- **3-YEAR LIMITED WARRANTY**



## Seagate Rescue Data Recovery for peace of mind and differentiation

If data is unintentionally deleted or corrupted by viruses, our optional Rescue Data Recovery Service Plan provides a fast and easy recovery process within 15 days. Seagate leads the industry in data recovery with a 90% success rate!

**Changwu County Police** credits the Seagate Data Recovery Services Team with helping solve gold heist:

“ We believe that Seagate played a key role in helping us crack the case and made great contributions in the investigation. The teamwork, energy, and interdepartmental cooperation and outstanding professional skills exhibited by Seagate greatly impressed all the police officers in the investigation. ”

- Changwu County Police Official

Read the full story at [www.seagate.com/case-studies/seagate-data-recovery-services-team-helps-solve-gold-heist-master-cs/](http://www.seagate.com/case-studies/seagate-data-recovery-services-team-helps-solve-gold-heist-master-cs/)

# The Seagate Portfolio

Security can take many forms. While Surveillance HDD is our major drive for video surveillance systems, we manufacture drives for smaller configurations, as well as larger enterprise surveillance systems.

Surveillance applications	DVR video surveillance systems	NVR video surveillance systems	Video Management and Video Retention systems
Typical usage environments	Residential, SMB, F&B/Retail, Commercial Facilities	Casinos, Commercial Buildings, Campuses, Factories, Hotels	Bank, Casinos, Airports, City Surveillance, Border Control, Homeland Security
Key systems requirements	<ul style="list-style-type: none"> <li>✓ Reliability</li> <li>✓ Cost</li> <li>✓ Power</li> </ul>	<ul style="list-style-type: none"> <li>✓ Reliability</li> <li>✓ Scalability</li> <li>✓ Data Loss Protection</li> </ul>	<ul style="list-style-type: none"> <li>✓ Performance</li> <li>✓ Reliability</li> <li>✓ Data Integrity</li> </ul>
Seagate recommendations	<b>Surveillance HDD</b>		<b>Enterprise Capacity 3.5 HDD</b>
	7 <sup>th</sup> generation of drives tuned for high-write cycle workloads typical in video surveillance storage systems; high storage capacities support higher-resolution cameras and systems with high drive counts for reliable drive performance		
	<b>Low Power 1TB-3TB</b>	<b>RV tolerance 4TB-8TB</b>	
Form Factor	3.5 inch	3.5 inch	3.5 inch
Capacity, TB	1, 2, 3	4, 5, 6, 8	1, 2, 3, 4, 5, 6, 8
HD Camera Count	Up to 64	Up to 64	100+
Drive Bays Count	Up to 8	8+	8+
RV Sensors	No	Yes	Yes
Performance, Max Sust DTR, MB/s	180	180	226
Cache, MB	64	64 and 128	128
Reliability, MTBF, hrs	1 Million	1 Million	2 Million
Workload Rate Limit, TB/year	180	180	550
Operating Power, W	5.6	5.6 to 9	7.9 to 10.6
Time-to-Ready	Better: Idle 1,2,3	Better: Idle 1,2,3	Best: Power Choice
Data Recovery	Yes	Yes	No
Data Security	No	No	ISE, SED, FIPS
Limited Warranty	3 years	3 years	5 years



# 10 Years Strong

Only Seagate Surveillance HDDs deliver 10 years of advanced technology and always-on reliability.

- EXPERIENCE**  
 When your clients' data is at stake, only the best is good enough. The product of 10 years of industry-leading technology innovation, only Seagate Surveillance HDD combines always-on reliability with built-in data recovery to help protect your data and secure your property. Why settle for less?
- INNOVATION**  
 We don't rest on our laurels. We innovate year after year, with an annual investment of over US\$1 billion for research and development.
- RELIABILITY**  
 Seagate has the most reliable drives of any drive maker. The more data recorded, stored, and retrieved, the more valuable that data becomes. It's critical to have drives that excel at performance and reliability.
- SCALABILITY**  
 Seagate Surveillance HDD drives support 1 to 64 cameras recording in high definition. RV sensors allow you to design RAID environments with 8 or more drives. Scale up or down with reliability and performance in mind.

Oncam Grandeye looks to Seagate to maintain its competitive edge:



“ We were looking for products which were server-quality with AV applications in mind, and Seagate has proved to be a market leader in developing this kind of technology. We found that Seagate had the right technical specifications for our requirements, the best match for price, performance, and storage capacity.”

- Bryan Waters, Oncam Grandeye

## 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.

As a Seagate Partner, you'll receive regular product and industry updates in our monthly newsletter, access to our valuable SPP Portal, and priority access to our support team.

Our SPP Portal offers immediate access to these valuable resources to help you get up to speed on hot new products and technology:

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

Start reaping the rewards of SPP membership — register today at [www.seagate.com/partners](http://www.seagate.com/partners)

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

## SERVICE AND SUPPORT

### Products and Services:

[www.seagate.com/about/contact-us/technical-support](http://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

### Warranty Support:

[www.seagate.com/support/warranty-and-returns](http://www.seagate.com/support/warranty-and-returns)

### Data Recovery Services:

[www.seagate.com/services-software/](http://www.seagate.com/services-software/)

### Seagate OEM and Distribution

#### Partner portal:

[www.seagate.com/partners/#](http://www.seagate.com/partners/#)

#### Seagate Reseller portal:

[www.seagate.com/partners](http://www.seagate.com/partners)

for comments about this guide, email us at [sppl.feedback@seagate.com](mailto:sppl.feedback@seagate.com)



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<http://www.seagate.com/surveillance/>