Seagate’s Surveillance Portfolio

A complete surveillance storage portfolio for safety, security and video analytics
Securing your business and home

With simple solutions to provide protection, keeping your home or office safe is easy. The wide variety of DIY solutions helps secure your most valuable assets.

Public safety and events

Securing schools, offices, shops and events is a top priority and recording from multiple cameras is critical. Streaming and recording content to a central location allows for higher reliability and storage expansion for these solutions.

Video analysis and intelligence

The opportunity to analyse and make use of large amounts of video data is enormous. Cities can predict and improve traffic flows. Stores can lay out merchandise in more compelling ways. Airports can reduce wait times. Emergency responders can react faster. The possibilities are endless. Centralised storage of this video “big data” set optimises your access, analysis, and potential for action.

The evolving Surveillance marketplace

As the Surveillance market evolves from standard-resolution analogue cameras to increasingly HD digital video, the Network Video Surveillance market continues its rapid growth – in fact, the EMEA market is forecast to grow its revenues at a CAGR of 22%.

Today’s best Surveillance Solutions Providers leverage these technological advances, allowing you to add previously-impossible value when answering your clients’ needs:

- Reliable, write-optimised drives designed for a 24 x 7 environment
- Robust, secure, multi-camera support
- High-performance makes HD Streaming and sophisticated Video Analytics simple

DVR Market Shares

The EMEA market for CCTV and Video Surveillance Equipment is forecast to grow at a CAGR of 9.5% to over $4,200 million by 2017, but supply to the Digital Video Recording market remains highly fragmented – roughly two thirds of revenues came from suppliers with a market share of less than 2%, while the top 10 suppliers are thought to have accounted for less than a third of revenues. (IHS, May 2013)

What’s more, more than 9 out of every 10 SDVR and NVR enclosures sold are sold diskless, ensuring the Surveillance Storage market is a fantastic opportunity for every type of Seagate Partner.

413 petabytes of data are produced in just one day by video surveillance cameras installed worldwide in 2013.

IHS October 2013
Choosing the right Seagate drive

There are a number of important factors to be considered when choosing an HDD for your Surveillance Solutions:

- 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?

Understanding your system workload allows you to determine the performance required from the drive; e.g., a system used for fast video analytics (such as facial recognition programs) has very different requirements to one that simply records content and plays it back only when it needs reviewing.

In order to manage the vast amounts of video (and related metadata) captured by an intelligent surveillance solution, a relational database or similar traditional data system is typically used – it’s critical that disks for such systems employ the utmost levels of performance and error detection & correction to ensure data integrity isn’t compromised.

Government or retail applications usually require data be stored for a given amount of time versus a typical home security system, which is usually saved for about a month, information that helps you determine your system’s capacity, streaming and vibration tolerance requirements.

These are just some of the important considerations when choosing the right drive for your Surveillance Solution to ensure reliability and maximise ROI. Whatever your system requires, you’ll find the perfect drive in Seagate’s Surveillance Portfolio.

### Application
- Low cost, low resolution, simple to install and use for SMB, retail and commercial use, or home applications
- Central monitoring applications typically using IP cameras for medium-sized businesses like banks, casinos or airports
- Bulk storage, data centre, government or corporate applications where HD video and/or video analytics are valued

### Advantages
- Low power, quiet, reliable storage for consumer or SMB surveillance
- Reliable performance in multi-drive systems with quick time-to-ready
- Fast random performance and time-ready in multi-drive applications. PowerChoice™ technology for customised time-ready and power savings

### Form factor/capacity
- 3.5-inch: 250, 320, 500GB; 1, 2, 3, 4TB
- 2.5-inch: 250, 320, 500GB
- 3.5-inch: 1, 2, 3TB
- 3.5-inch: 3, 4TB

### Performance
- Max Sustained Data Rate
- 180MB/s Max Sustained Data Rate
- 100MB/s Max Sustained Data Rate
- 210MB/s Max Sustained Data Rate
- 175MB/s Max Sustained Data Rate

### Data security
- 0.55% AFR
- 0.55% AFR
- <1% AFR
- <1% AFR

### Reliability
- 3 years
- 3 years
- 3 years
- 5 years

### Limited Warranty
- 3 years
- 3 years
- 3 years
- 3 years

### Seagate Solution
- Video 3.5 HDD
- Video 2.5 HDD
- SV35 Series™ HDD
- Surveillance HDD
- Enterprise Capacity 3.5 HDD
Video 3.5 HDD

Introducing the industry’s leading consumer video storage device and the world’s first 4TB drive built specifically for video applications, Seagate’s Video 3.5 HDD delivers:

- 18 simultaneous streams of HD content
- Designed for up to 6-bay systems
- Near silent acoustics
- 4TB video storage solution – up to 480 hours of HD video
- 24×7 operation for always-on demands DVR devices

Seagate is committed to environmental stewardship – as well as operating with some of the industry’s lowest overall power consumption profiles, the coolest operating temperatures and the best AFRs, the Video 3.5 HDD also:

- Designed to meet Energy Star and other strict consumer power consumption standards
- Contains up to 50% recycled materials & uses materials that are 70% recyclable
- Meets all RoHS and new REACH standards
- Is low halogen use

Who needs it?

DVR/PVR (Digital Video Recorders/Personal Video Recorders) & STB (Set Top Box) manufacturers; Media Centre PC developers.

Best-fit Applications

- Entry-level or home surveillance systems
- Consumer digital video recorders
- Media servers and centres
- Home cinema PCs and servers
- Cable, satellite and IPTV set-top boxes

Key Opening Questions

- What’s your biggest expense in building STBs?
- Are you frustrated with the technical support you receive in your qualification process?
- Have you looked at Video 3.5 HDD performance and reliability compared to the competition?

Seagate Video 2.5 HDDs are offered in a 7mm form factor, allowing flexibility for design integration. A 500GB 7mm Seagate Video HDD takes up 1/6 the space of the same 3.5” 500GB video hard drive and consumes 55% less power.

From streaming to acoustics to reliability, Seagate Video 2.5 HDDs are fine-tuned to thrive in 24 x 7 video applications for both system integrators and end users:

- Industry leading AFR of 0.55%
- Media streaming optimised for 12 HD streams
- Video playback optimised with Command Completion Time (CCT) to ensure smooth data delivery

Selling Video 2.5 to your customers

Who needs it?

DVR/PVR (Digital Video Recorders/Personal Video Recorders) STB (Set Top Box) manufacturers; Home theatre PC developers; Cost and small factor focused surveillance DVR manufacturers.

Key Opening Questions

- What’s your biggest expense in building STBs?
- Are your customers looking for smaller, sleeker products?
- How important is reducing your environmental footprint?

Best-fit Applications

- In-camera or surveillance systems
- DVR and media centre applications
- Home cinema PCs
- Karaoke and audio jukeboxes
- Cable, satellite and IPTV set-top boxes

Selling Video 3.5 to your customers

Who needs it?

DVR/PVR (Digital Video Recorders/Personal Video Recorders) & STB (Set Top Box) manufacturers; Media Centre PC developers.

Best-fit Applications

- Entry-level or home surveillance systems
- Consumer digital video recorders
- Media servers and centres
- Home cinema PCs and servers
- Cable, satellite and IPTV set-top boxes

Key Opening Questions

- What’s your biggest expense in building STBs?
- Are your customers looking for smaller, sleeker products?
- How important is reducing your environmental footprint?

Best-fit Applications

- Entry-level or home surveillance systems
- Consumer digital video recorders
- Media servers and centres
- Home cinema PCs and servers
- Cable, satellite and IPTV set-top boxes

Additional sales materials available at spp.seagate.com:

- Video 3.5 HDD Data Sheet
- Video 3.5 HDD Banners
- Visit Seagate.com

Additional sales materials available at spp.seagate.com:

- Video 2.5 HDD Data Sheet
- Video 2.5 HDD Banners
- Visit Seagate.com
Selling Seagate® SV35 to your Customers

Competitive Analysis

New SV35 drives with 1TB per platter technology have been shown to reliably support up to 32 simultaneous HD video streams. This results in unprecedented low cost-per-surveillance camera and a fantastic Return on Investment.

Opening Questions

• What kind of infrastructure is in place for your current surveillance system?
• How do you measure storage effectiveness in your surveillance systems?
• Would you agree that cost/GB as well as cost/video stream are the most important metrics?
• How would your customers react to you using the industry’s only surveillance optimised hard drive?

Key Selling Points

• Surveillance optimised 1, 2 and 3TB drives yields Best In Class cost/GB and cost/stream performance
• ActuTrac™ improves tracking reliability, even in higher vibration environments
• 1M hour MTBF demonstrates the reliability needed for surveillance solutions
• Qualified for 24X7 operation
• Supports up to 32 simultaneous streams

Key trends

Surveillance applications capture 18M TB of data every 14 days, require 24x7 operation and support for multiple streams.

Who needs it?

Surveillance digital video recorder (DVR) and Network Video Recorder (NVR) system designers and developers

Frequent customer questions

Argument: WD Green drives are a cheaper solution.
Response: SV35 drives deliver optimised performance with top reliability specs for surveillance applications. Using SV35 drives you can achieve a higher camera count per drive, actually driving down the total cost of ownership.
Enterprise Capacity 3.5 HDD

6TB Drive for Enterprise Surveillance Solutions that demand HD streaming and video analytics

The Enterprise Capacity 3.5 HDD is the perfect foundation for building maximum density into your surveillance storage solutions – these 6TB 3.5-inch capacity-optimised hard drives support the highest density storage per square foot for a fantastic ROI:

- Easily scalable storage offering enterprise class performance, reliability and security
- Support for 100+ cameras
- Designed for 10+ bay systems
- RV Sensors improve reliability
- SAS and SATA interface
- Up to 6TB per drive for maximum density server and storage solutions
- Designed for 24×7 reliability

24 × 7 Energy Efficient Video Storage

Purpose-built for enterprise environments, its minimum power and cooling envelope stores maximum capacity bulk data in the smallest footprint, while Seagate PowerChoice™ technology offers customisable power savings to support surveillance and enable the T10-compliant power management standard – resulting in up to 90% more power savings.

Protect Data with SED Options

Enterprise Capacity 3.5 HDD protects data where it lives – on the drive. Choose from Self-Encrypting Drive and SED FIPS 140-2 options* from the ES.3, ES.2 and ES drive generations. Also included is Seagate Instant Secure Erase technology for easy and cost effective drive disposal.

*SED FIPS 140-2 Validated drives are not available in all models or countries, see Seagate Encrypting Drives Import/Export Compliance. May require TCG-compliant host or controller support. FIPS 140-2 Level 2 Certificate at http://csrc.nist.gov/groups/STM/cmvp/validation.html#05.

5 year limited warranty

Highest capacity drive on the market!

Selling Seagate Enterprise Capacity 3.5 HDD to your Customers

Competitive Analysis

Competitor Option A: Expensive, hermetically sealed, helium-filled HDD in 6TB capacity via 7 disks in 3.5-inch form factor.
Competitor Option B: No SAS option. Drives lack SED FIPS and Instant Secure Erase for easy drive disposal or repurposing.

What problems are Enterprise Capacity 3.5 HDD customers trying to solve?

Lack of available information: They need HD Video and sophisticated Video Analytics in bulk storage, Data Centre, government or corporate environments.

Rapid data growth: They need the highest capacity possible that will run reliably in multi-drive environments.

High power consumption and other running costs: They need to save money on cooling, and reduce overall power consumption. They need to achieve efficiencies in storage management overall as IT budgets are limited.

Opening Propositions

- “Does your Surveillance network have more than 100 cameras?”
- “How important is it to you that your system offers a very quick time-to-ready?”
- “Do you want the maximum amount of storage per square foot of premises?”
- “Do you need drives that can easily and securely be disposed or repurposed?”
- “Would you like faster RAID rebuilds?”

Who needs it?

Customers with bulk storage, data centre, government or corporate applications where HD video and video analytics are valued.

Frequent customer questions

“Won’t a desktop 7,200-RPM SATA drive work just as well?”

No. In multi-drive environments, the RV-enhanced enterprise drives perform consistently better – even in a less robust chassis. Enterprise Capacity is the optimum choice: a 3.5-inch high-capacity, low-power, highly reliable drive for multi-drive systems in both cloud and data centres of all sizes.

Key Selling Points

- Supports 100+ cameras
- Designed for 10+ bay systems, minimising the data centre footprint with up to 228TB per square foot
- Highest capacity drive on the market – up to 6TB
- Save on power and cooling costs with low operating power and more, with PowerChoice™
- Highest reliability with MTBF of 1.4M hours
- 6Gb/s performance in both SAS and SATA interfaces
- Seagate Instant Secure Erase for secure, easy and cost-effective drive disposal
- Seagate RAID Rebuild speeds up RAID recovery times significantly

Key trends

- Data capacity on average in enterprise data centres is growing at 40% to 60% year on year.
- 78% CAGR for mobile data up to 2016, and providing mobile users access to applications and information is changing the way data is stored.

Additional sales materials available at spp.seagate.com:

- Enterprise Capacity 3.5 HDD Product Overview
- Enterprise Capacity 3.5 HDD Customer Presentation
- Enterprise Capacity 3.5 HDD Sales Card
- Visit Seagate.com
Seagate Surveillance HDD

7th Generation Surveillance-Specific Drives

The 4TB Seagate® Surveillance HDD (formerly SV35 Series™) is designed to excel in 24x7 multi-drive Surveillance Solutions:

- Precision-tuned for surveillance workloads with high write work cycles
- Ready for up to 32 HD cameras
- Support RAID and Idle 3

Enterprise Class Reliability

Built for surveillance applications, Seagate’s Surveillance HDD are a key part of a solution that scales as your data increases – ideal in the growing NVR and standalone-DVR segments.

- Industry-leading MTBF of >1M hours; AFR of <1%
- Rotational Vibration (R/V) sensors in a RAID environment optimise performance in systems with up to 16 drives
- Surveillance-optimised firmware improves drive reliability up to 30%

Improved Time-To-Ready for Motion Sensing Cameras

Customise your power settings to support motion-activated cameras with Idle 3 support, while a quick time-to-ready requires smaller system buffer sizes and reduces costs.

Selling Seagate Surveillance HDD to your Customers

Competitive Analysis

Seagate’s seventh generation of surveillance drives are the only drives with features to improve performance in multi-drive systems with RAID support and ensure quick time-to-record using video recording sensors and idle 3 power settings.

What problems are Surveillance HDD customers trying to solve?

**Scalability:** The transition to networked systems requires 4x the capacity of analogue cameras.

**Reliability:** The more data that is stored, the more valuable it is, so high reliability is crucial.

Multi-camera support: Network video recorders need to be able to reliably support multiple cameras.

Opening Propositions

- What kind of surveillance system are you using today?
- What infrastructure is in place for your current surveillance system?
- What’s your biggest pain point in building surveillance systems?
- What requirements do your end users put on their surveillance systems?

Who needs it?

- Surveillance system integrators and installers commonly bidding on surveillance projects
- Surveillance manufacturers and distributors
- State, commercial and private end-users building Video Surveillance solutions

Frequent customer questions

- Desktop video HDDs are highly affordable, so why should I purchase a specialist surveillance drive?

Key Selling Points

- Up to 4TB of storage
- Support up to 16 drives per system and 32 cameras per drive
- Precision-tuned for surveillance workloads
- Rotational vibration sensors for reliable performance in multi-drive, RAID enabled systems
- Idle 3 settings for quick time to ready, to support motion sensing cameras
- 24 x 7 operation with one million hours MTBF

Key trends

- Analogue Video Surveillance market in EMEA is declining at a CAGR of 10%
- The Network Video Surveillance market in EMEA is growing at a CAGR of 20%

Desktop HDDs don’t deliver the performance and reliability you need. Surveillance drives are optimised for surveillance workload, data integrity, streaming and reliability in 24x7 multi-drive environments with RAID support. They also support a higher camera count. The bottom line is lower cost of ownership – by as much as 30%.

Additional sales materials available at spp.seagate.com:

- Surveillance HDD Drive Selection Guide
- Video versus desktop HDDs
- Surveillance HDD Data Sheet
- Surveillance HDD Customer Case Studies
- Visit Seagate.com