

Case Study

CR Kennedy

CR Kennedy Raises Reliability and Capacity With Surveillance-Optimized Hard Drive Solution

Company

CR Kennedy

Location

Victoria, Australia

Contact

www.crkennedy.com.au

Primary Focus

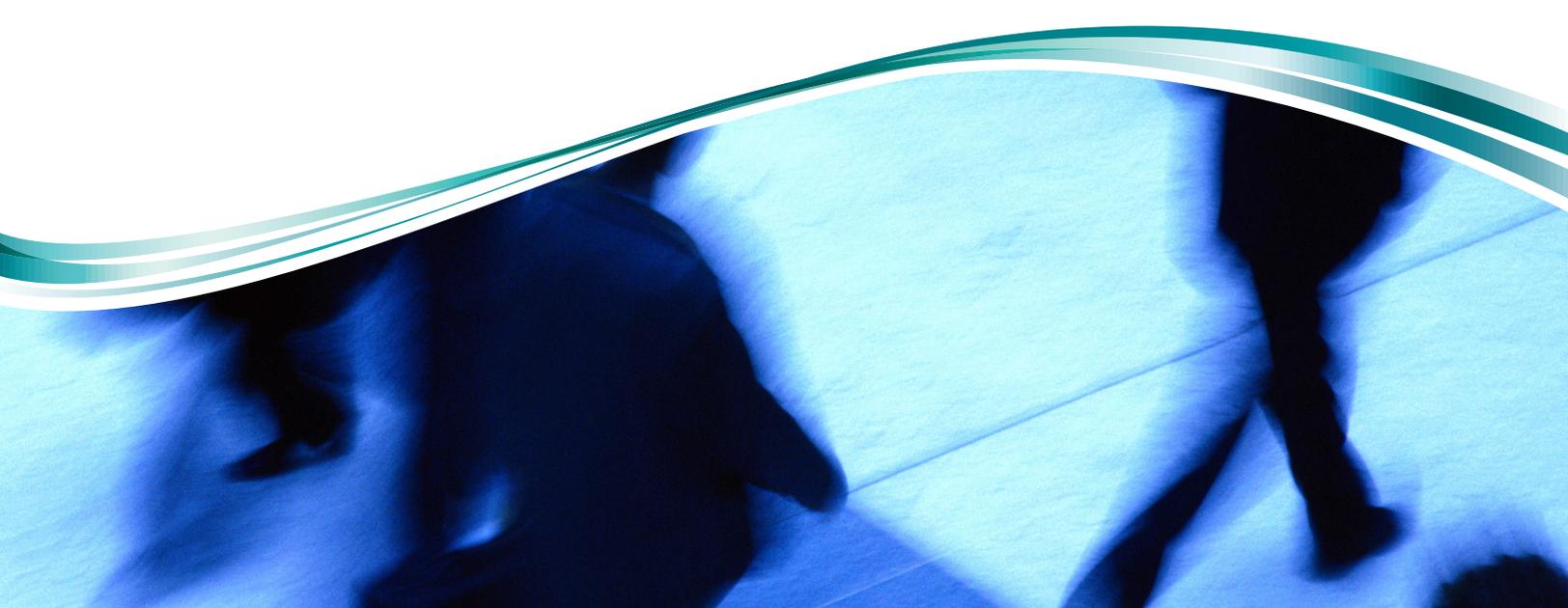
Video surveillance intelligent
CCTV camera, 360° IP cameras

Challenge

Leading digital closed-circuit television (DCCTV) system wholesaler CR Kennedy needs robust video storage solutions that deliver around-the-clock availability, optimal performance and reliability for the surveillance applications it builds for high-profile Australian and international clients.

Solution

The Seagate® Surveillance HDD (formerly SV35 Series™) is the industry's leading video storage solution designed and developed for the surveillance industry with features to optimize performance, save power and improve reliability in video surveillance applications.



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Benefits

- Risk mitigation and optimized performance through improved reliability, availability and quality
- Cost effectiveness
- Ease of deployment and optimized performance through use of industry standards
- Increased capacity for continuous recording and review long after the event, and ability to store many incoming feeds simultaneously

Crime and antisocial behavior come at great cost to business and the community. From graffiti, vandalism and theft, to world events that demonstrate the vulnerability of public places to attack, surveillance systems are playing an increasingly important role as both a deterrent and a source of evidence to support investigations and prosecutions.

With its specific application to the video surveillance market, the Surveillance HDD has become an important ally in CR Kennedy & Company's battle to protect people and property.

As Australia's largest distributor of photographic, surveying, surveillance, medical and digital audio equipment, CR Kennedy builds and supplies solution-based surveillance systems for many large, well-known corporate and government customers.

CR Kennedy builds solution-based surveillance systems that expert staff tailor to meet specific project specifications. The systems need to be robust, reliable and available 24x7. Business owners expect crisp, smooth digital footage to be retrievable days or weeks after an event occurs, at an image quality that allows suspects to be identified beyond reasonable doubt.

Seagate addresses the unique requirements of the video surveillance industry and DCCTV suppliers like CR Kennedy through their complete portfolio of hard drive solutions engineered to effectively, efficiently and reliably store video surveillance footage.

CR Kennedy joined the Seagate Partner Program following the initial launch of the Surveillance HDD for video surveillance applications. Shortly thereafter, the company began using the drives in their commercial and government surveillance systems.

"Seagate recognized that purpose-built video surveillance systems are an effective way of protecting both public and private institutions, people and property," CR Kennedy's Derek Barratt-Thompson said.

While server-grade drives provide the reliability required for constant-use scenarios, they are significantly more expensive.

With the large capacity of the Surveillance HDD, CR Kennedy can offer solutions to our customers with massive storage capacities but fewer drives. . . Customers always want more storage and we don't see this changing.

Derek Barratt-Thompson
CR Kennedy

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Using a less expensive option—desktop-grade hard drives—for surveillance purposes brings other limitations and risks. Non-stop activity can cause hard drives to fail, and standard desktop drives are not tuned for video streaming performance. Therefore, desktop hard drives are not an option for professional suppliers like CR Kennedy.

Premium Performance Without the Premium Price Tag

Purpose-built Surveillance HDDs overcome cost and performance limitations by including technologies that minimize the likelihood of failure in surveillance systems—without a price premium over desktop drives with less capability.

“CR Kennedy can now maximize video storage capacity and reliability for our customers with a cost-effective DCCTV solution,” Mr. Barratt-Thompson said.

“The Surveillance HDD is specially designed and developed for the surveillance industry with features to optimize performance, save power and, most importantly, to maintain and improve reliability in video surveillance applications.”

Surveillance HDDs are easy to integrate into systems because they are built around standard PC interfaces but have features similar to high-end server drives to safeguard the drive’s longevity.

The drive’s cost is competitive against standard PC desktop drives (and represents a small fraction of the cost of solid-state storage), giving CR Kennedy customers a virtually cost-neutral upgrade to a higher level of reliability.

As in many other critical technology environments, hardware does not pose the biggest cost. For example, if surveillance video needs to be recovered from a desktop PC drive found to be faulty, recovery costs could run into thousands of dollars. In worst-case scenarios, recovery may be impossible, and the cost derives from an unsuccessful prosecution or failed insurance claim.

Capacity and Quality

Hard-drive based recording is the key to capturing many camera feeds at full quality simultaneously, according to Mr. Barratt-Thompson.

“The surveillance industry needs massive hard drives which allow the storage of huge quantities of digital video data whilst also providing unprecedented fast access and review of recorded video not possible on legacy tape-based systems,” he said.

The high-capacity Surveillance HDDs—which range from 1TB to 4TB—are ideal for storing many incoming feeds at once while preserving image quality and frame rate.

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“With the large capacity of the Surveillance HDD, CR Kennedy can offer solutions to our customers with massive storage capacities but fewer drives. This brings benefits of less cost, less generated heat, less noise and—very importantly—less maintenance,” notes Mr. Barratt-Thompson. “Customers always want more storage and we don’t see this changing. Through their partnership with Seagate, CR Kennedy can offer customers a full 4TB of storage on a single drive.

The massive storage capacity not only allows weeks of uninterrupted high-quality video recording, it enables workflow efficiencies in analyzing historical footage, such as the pattern-recognition software and event retrieval.

Engineered to Reduce Heat

Surveillance HDDs overcome heating issues that can hamper reliability of systems using standard desktop drives. They produce less heat, consume less energy and are more resilient to external heat sources than regular hard drives.

This is crucial for surveillance systems, which are usually recording 24 hours a day, constantly writing to the hard drive, and sometimes housed in concealed positions where airflow is not ideal.

Desktop PC hard drives, in comparison, are designed around the assumption that a PC will frequently sit idle, allowing the hard drive time to cool down. Constant overheating can affect data integrity, because expansion of air and metals in the drive can cause head fly height to fluctuate, which in turn causes variation in the magnetic field used to write data. In extreme cases, the physical media can degrade, leading to catastrophic hard drive failure and expensive data recovery costs.

Seagate surveillance hard drives are resilient toward these risks. The large capacity of the Surveillance HDD means fewer drives need to be installed in a system chassis, further reducing heat and power consumption and providing additional benefits, such as lower server cooling costs.

Industry Streaming Standard Optimized Video

The Surveillance HDD is among the first in the industry to include support for the new ATA-7 industry standard that allows software to tune drive performance for video streaming.

A time limit can be set on certain drive operations, ensuring video is smoothly saved to disk and played back. For example, while a desktop drive might spend seconds reading and rereading a few bits of data, it is far more important in a video-capture scenario to keep the stream moving, so that whole frames of video are not dropped.

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Additionally, the Surveillance HDD is optimized for write performance in both seek- and write- caching firmware. This is key for video surveillance storage workloads, where writing data can represent up to 95% of the hard drive's operation. Favorable performance and drive longevity are highly dependent upon this enhanced write functionality.

Surveillance HDDs are a natural choice for surveillance solution suppliers like CR Kennedy, who want to offer customers the assurance that their surveillance storage is expertly engineered for reliability and performance, without the price tag usually attached to application-specific hardware solutions.

To Learn More:

Seagate® Surveillance HDDs

For more information on utilizing Surveillance HDDs for video surveillance operations, visit www.seagate.com.

www.seagate.com

AMERICAS	Seagate Technology LLC	10200 South De Anza Boulevard, Cupertino, California 95014, United States, 408-658-1000
ASIA/PACIFIC	Seagate Singapore International Headquarters Pte. Ltd.	7000 Ang Mo Kio Avenue 5, Singapore 569877, 65-6485-3888
EUROPE, MIDDLE EAST AND AFRICA	Seagate Technology SAS	16-18, rue du Dôme, 92100 Boulogne-Billancourt, France, 33 1-4186 10 00

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