

# Large-scale surveillance solutions need purpose-built NVR hard drives

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3 Sep 2015

When it comes to safety and security, video surveillance has become an essential component of many security systems. Digital solutions have made this easier and more affordable and allowed for video surveillance to be installed in many more areas than ever before. In addition, increased camera resolution allows for higher quality footage and fewer cameras needed to cover the same physical area.

However, the move toward digital and the growing storage requirements that come along with improved resolution has made the hard drive critical in surveillance operations. In large-scale deployments, such as those used in entertainment facilities like casinos, amusement parks and museums, multiple cameras need to be linked together, necessitating the use of Networked Video Recorders (NVRs). In such scenarios, the right hard drive is more important than ever, as all hard drives must work together seamlessly to record and store footage. Utilising the incorrect drive could have disastrous consequences that can easily be avoided by using purpose-built NVR hard drive technology.



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## Hard drive, the critical component

In consumer-facing industries such as entertainment, protecting customers is of the utmost importance. Surveillance is, therefore, an essential security component, but covering every area of these facilities requires many cameras in many locations. In the past, this may have required hundreds of cameras, but with new HD and 4K surveillance technology offering enhanced video resolution, the number of cameras can be reduced. However, the need for many cameras remains, and storage capacity becomes problematic with higher resolution cameras.

NVR systems are ideal for such scenarios, offering multiple hard drive bays. However, as NVRs are basically just software that enables a hard drive to record video, the hard drive is the critical component. It is vital to these security operations to utilise a hard drive that is purpose-built and designed to handle the 24x7, high demand and high-performance environment required by an NVR. In addition, high capacity drives of up to 6TB per drive ensure NVR solutions can support the demands of multiple high definition cameras without the need to expand the number of drive bays.

## Creating always-on environments

When incorrect hard drives are used as storage in security systems, particularly when there's multiple video streams and high definition footage requiring continuous capture, sometimes interruptions to video are experienced - highly undesirable for security applications. In addition to the ability to support increased numbers of video streams and an enhanced workload capability, purpose-built NVR surveillance-class hard drives are designed to operate in higher temperature, always-on environments.

They offer high-performance features such as improved write performance, which reduces frame loss and improves streaming playback. This is critical in a surveillance environment, where each and every frame is essential to building a complete picture of events, and where footage needs to be played back while the system is still recording.

Furthermore, the components of these hard drives are more durable and resistant to the often harsh environment of surveillance systems, which may be installed in outdoor cabinets or other areas where conditions are less than optimal. Increased durability increases the reliability of the hard drive over time, especially when compared to desktop drives.

## Optimised for support

Purpose-built NVR hard drives are optimised to support systems that make use of high-definition surveillance cameras, which gives organisations the flexibility to upgrade and expand existing security systems in future. With higher storage capacities, it is also possible to store more surveillance footage for longer periods of time. Lower power consumption and reduced vibration are also critical features in high-temperature, always-on surveillance environments. These help to reduce damage that can cause drives to wear out more quickly and increase reliability.

Surveillance has become essential when it comes to safety and security. The higher the definition of the cameras, the better the footage is for evidentiary and preventative purposes. However, in digital NVR systems the hard drive is a crucial component, potentially the single point of failure if the inappropriate technology is used. Purpose-built NVR hard drives can help organisations, including entertainment facilities, to ensure their surveillance is up and running at all times, allowing security personnel to do their job of protecting against crime.

## ABOUT KALVIN SUBBADU

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