

## **7 reasons why it's time to upgrade to IP CCTV**

Performance, consolidation and reduced cost advantages of networked CCTV security systems



## INTRODUCTION

One of the inevitabilities of technological development is that products get smaller and cheaper. It also brings more features and improved capability for meeting the requirements of the intended purpose.

CCTV is one area of applied technology that has seen incredible advances in recent years, transforming its capability out of all recognition.

- Higher resolution cameras with up to 30 megapixel using CMOS chipsets
- Wireless networking capability to link cameras to controllers and recording devices
- Improved image fidelity as reduced storage costs eliminate the need for compression

There is also a perception that advancing technology drives up costs. While that may seem correct when looking through a narrow field of vision at hardware costs, we only get the true picture when we look from a wider perspective and from alternative angles.

We see the bigger picture when we include the significantly improved security performance and the vastly reduced installation and maintenance costs. This enables us to understand the value proposition in the context of the Total Cost of Ownership (TCO). In this guide we look at the top 7 reasons to upgrade to IP CCTV.

## 1. No need to junk your existing investment

It is easy to gain the impression that to upgrade to IP CCTV you need to rip out everything you have and start again. This is simply not true. A good way of bridging the gap between the benefits of an IP-based system and older CCTV is to upgrade your existing cameras with encoder cards.

This digitises the images from your cameras enabling them to be recorded as digital files on either computer server systems or hardware Network Video Recorders (NVR's). The recorded image is of the same quality as the live visual image with lossy H.264 compression, and represents a significant improvement over analogue recording and playback which is characterised by huge compression and frame loss.

## 2. Higher resolution cameras enabling consolidation

Greater capability of digital HD CCTV cameras means there is much more flexibility in the angle of view, as well as an increased range at which footage is usable for the purpose intended. This means fewer cameras are required and enables cameras to be consolidated. Reducing camera numbers can make the system seem less obviously intrusive while reducing maintenance requirements.

## 3. No messy and expensive cabling installation with wireless IP CCTV

It used to be that networked CCTV required structured network cabling (cat5) like that used for computer networks. One approach is to 'flood wire' where extra cabling is installed to cope with any future increase in the numbers of networked devices. Many earlier networked systems would use these extra cables if available, but this was only of some convenience.

Cameras are usually located in places such as ceilings, high on walls or atop posts or masts, places where you are unlikely to have wanted a computer and that would not have been included in any standard flood wiring plan! So cabling work would be needed to extend existing cables that were in the wrong place, or install completely new ones.

Wireless IP CCTV eliminates the need for network cabling. This means faster, tidier installations that are more difficult to tamper with, as well as less disruption and reduced costs.

## 4. Improved flexibility and safety for security staff

HD CCTV systems also enables wireless connection to mobile devices such as tablets and smartphones. This frees security personnel as they are not tied to the monitoring station and are able to physically investigate while still be able to monitor the live CCTV system feed.

This means far greater safety for security personnel. Whether it is threat from fire, or an intruder, they have a much better idea of what to expect on arrival at the camera position.

## 5. Superior processing for viewing, identification and analysis

Once images are in HD digital formats, a powerful range of image and data processing techniques is available to support your security objectives. The use of software tools for enhancing, processing and analysing HD CCTV footage enables:

- Image enhancement to clean up video where necessary
- Zooming on long distance footage while maintaining image fidelity
- Facial recognition of individuals
- Predicting the likely actions of individuals observed on CCTV systems
- ANPR (Automatic Number Plate Recognition) to allow access to permitted vehicles
- Cameras with integrated self-learning video analytics for monitoring and reporting property boundary intrusion alerts to alarm monitoring stations

## 6. Integration with other systems to improve security

Digital CCTV enables the integration of visual security information with the wider family of security systems you use to safeguard your premises. Importantly, integrating CCTV with your other monitoring and surveillance systems enables visual verification.

This is essential where police or fire response is required. Police are likely to attach a low priority to alarm activations that are not verified; UK fire services now operate a cost recovery policy for responding to repeated false alarms.

Integration with CCTV provides visual verification of identity with other security systems including:

- Intruder and fire alarm systems
  - Visual verification of alarm activation from compliant monitoring stations
- Audio Entry systems
  - Visual verification of the identity of people requesting access with name and password
- Access Control systems
  - Challenge cardholder if identity cannot be verified by CCTV

## 7. Enables compliance with the ICO and DPA requirements for CCTV systems

From an operational perspective, digital CCTV systems are infinitely more secure than analogue systems and user access to control the system and access images can be tightly controlled, monitored and recorded.

Much greater control of CCTV system security enables you to meet one of the key requirements of the Information Commissioner's Office (ICO) code of practice under the Data Protection Act (DPA) 1998: To protect the privacy of individuals that may be identified using CCTV.

The powers of the ICO for dealing with breaches of the UK Data Protection Act include:

- Financial penalty notices of up to £500,000 for serious breaches of the DPA
- Prosecutions and custodial sentences are an option for deliberately breaching the DPA

### SUMMARY

## How iC2 helps you get the full benefits of IP HD CCTV

iC2 is a leading mid-market security systems provider and was established in 2001. The business is owned and managed by a team with a collective experience of over 100 years in the electronic security business. iC2 holds CCTV and security accreditations with NSI and BSI.

If we couple value and TCO together, the case for upgrading to networked, IP CCTV is truly compelling:

- Improved value – because it is fitter for purpose as a deterrent, and a tool for detection and identification
- Lower Total Cost of Ownership (TCO) – because it has vastly reduced installation and maintenance costs
- Improves security and safety – because it enables integration with other security systems such as access control and fire and intruder alarms

A prestigious client list including luxury international boutique brands, top flight sporting venues, retail developments and educational and social environments demonstrates how solutions are deployed to meet a variety of requirements.

From deterring theft of high value luxury goods, to sports fan and public safety and child protection, solutions are deployed to meet a range legitimate purposes for which they are appropriate and fit for purpose.



**T:** 020 3747 1800

**E:** [info@ic2cctv.com](mailto:info@ic2cctv.com)

**W:** [www.ic2cctv.com](http://www.ic2cctv.com)

## About Us

**Keeping you safe and secure at all times**

**ic2 provide you with innovative solutions tailored to you and your sector. We are London-based with a national team of surveyors and engineers that work closely with our clients throughout the UK and internationally.**

Our unique consultative approach allows us to tailor bespoke systems to your individual requirements, ensuring that your operational requirements are met.

We appreciate the need to demonstrate the best value to you every time and as a technology-led company, you can expect our cutting-edge and ground-breaking approach to serve your needs for many years to come.

Please feel free to contact us to discuss any requirements you may have. We are happy to give you impartial advice, should you have any queries.

