



Why Public Space CCTV must consider Wireless Technology

Introduction

Surveillance and CCTV is undeniably omnipresent in today's society. Whether it's shops, hospitals, airports, schools or train stations; big brother is watching. So why should public space be any different? Recent surveys and studies have indicated that public opinion on CCTV, although still divided, a large majority now admit that they feel safer in areas where Public CCTV is in operation.

The UK has more CCTV cameras per capita than any other European country and CCTV for Public Space Surveillance in the UK has developed at a faster rate than anywhere else in the world; from fewer than a handful of city systems in 1990 to more than 350 town and city centre systems at present covering well over 1,000 UK towns and cities.

So no longer is the questions, Why do we need CCTV? It's more, 'What is my Local Authority doing to ensure Public Safety in this economic downturn, plagued with budget cuts?'

Thankfully this is where emerging technologies present a compelling case. The benefits of IP solutions over historic analogue systems will only be further enhanced and documented in 2013 and it is predicted that Wireless CCTV solutions will really come to the fore.

Why Wireless?

With Wireless Public Space CCTV, long gone are the days of massive investment with depreciating assets. The latest surveillance technologies present a wealth of cost savings, superior quality footage, enhanced storage and review capabilities and truly scalable solutions.

Rapid Deployment and Redeployment

Wireless CCTV cameras can be deployed and redeployed quickly and efficiently, which is the polar opposite to traditional fixed analogue cameras that require a dig solution.

Deployment and redeployment of cameras can be configured in days.

Rapid Deployment and Redeployment cont...

Such time savings greatly benefit the emergency services enabling them to target crime hot spots and monitor temporary events that possess an element of public risk. Moreover with Wireless technologies the police and local authorities can share services and cameras, presenting an even greater cost saving.

In addition to the time savings, which also deliver a cost saving in regards to labour, the deployment and redeployment of Wireless cameras pose very little service interruption unlike its fixed analogue predecessor which demands a dig solution.

Migrate gradually with a Hybrid Solution

Wireless cameras can be gradually introduced and added to existing systems to create a hybrid solution.

An evolutionary approach to migration negates the high up-front costs associated with analogue systems. Moreover there is no mass 'rip out and replace' required.

Image Quality

Indisputably, a wireless HD camera can deliver better image quality and higher resolution than an analogue CCTV camera. Wireless Megapixel and HDTV network cameras provide high quality detailed footage and can employ progressive scan for superior image quality even in scenes with a high degree of motion. In addition HDTV video can be streamed reliably over a wireless network.

In a fully digital wireless surveillance system, images from a network camera are digitised once and they stay digital with no unnecessary conversions and no image degradation. In addition, digital images are stored and retrieved much more effectively in terms of cost and space.

Audio

Wireless surveillance solutions also support two-way audio, allowing users to listen in on an areas as well as playback a recorded audio clip to visitors or intruders remotely. Audio detection can also be used as an event trigger, which for example can be used to direct a PTZ network camera or initiate recording of video; all automated and managed wirelessly.



Why Public Space CCTV must consider Wireless Technology

Event Surveillance

The aforementioned swift and cost effective deployment is illustration enough as to why a wireless CCTV solution is most appropriate to monitor an event.

Advanced wireless cameras include built-in features such as video motion detection, audio detection alarm, active tampering alarm and alarm and event management functionalities. These features enable the surveillance solution to constantly analyse inputs to detect an event and to automatically respond to it.

Such functionalities are not available in an analogue system and the use of this intelligence results in the reduction of irrelevant recordings for more effective viewing.

Enhanced Storage

Efficient storage delivers obvious benefits in terms of hardware requirements. In addition smart storage is also more flexible in video format, with wireless and IP cameras offering more than one video compression format including include Motion JPEG, MPEG-4 Part 2 and H.264.

H.264 is the latest addition and it offers substantial savings by reducing storage costs and increasing the overall efficiency. Without compromising image quality, H.264 can reduce the size of a video file by 80% compared with Motion JPEG and up to 50% compared with MPEG-4.

Eliminating Risk with Edge Storage

Edge storage allows a wireless camera to record video directly to a storage device such as an SD/SDHC card, thereby creating a more robust, reliable and flexible video surveillance system.

The cameras can record video locally when the central system is not available, or continuously record in parallel. Boston Networks wireless Street Vision camera, features edge storage for truly optimal resilience.

Scalability and Flexibility

A wireless surveillance system can change and grow, almost immediately, as situations and requirements dictate. Cameras can be added and/or moved to without significant or costly changes to the wireless infrastructure and no service interruption.

Cost Effectiveness

Wireless surveillance solutions are much less expensive alternatives than traditional coaxial and fibre cabling for an analogue CCTV system. In addition, digital video streams can be quickly and swiftly viewed in various locations and also seamlessly integrated in to an intelligent control room.

Management and equipment costs are also lower with the adoption of back-end application, smart storage and open systems-based servers as opposed to proprietary hardware such as a DVR in the case of an analogue CCTV system.

Summary

With the security debacle surrounding London 2012 still fresh in the public's mind and the appalling riots witnessed in the UK last year it's no surprise government reports* continue to recommend that the sustainable use of technology to help improve community safety, effectively manage incidents and tackle crime, such as 3G and WiFi, should be given serious consideration for future CCTV growth.

Wireless CCTV solutions offer a myriad of benefits from cost savings to smart storage and enhanced images and will no doubt be on the agenda for many Local Authorities and play a key role in shaping the future of public space CCTV.

About Boston Networks

Boston Networks is a leader in the design, planning, installation and support of high-performance Intelligent Building Systems and Wireless Solutions.

Specialising in Cabling Services, Network Infrastructure, Wireless LAN & WAN and Integrated Security Systems, encompassing CCTV, Access Control, Fire Safety & Intruder Detection, we offer the best of breed technologies and deliver a comprehensive range of bespoke solutions and professional Support Services throughout the UK.