



Intelligent Building Solutions With OCTV (Open Circuit TeleVision)

The Background

The growing use of computers, digital technology and the Internet means that many traditional technologies are becoming easier to use, cheaper to purchase and more efficient to operate. One such area to benefit from these advances in technology is the CCTV camera and security system.

Intelligent Buildings provide greater control and integration than traditional CCTV (Closed Circuit TeleVision), Security, Building and Power Management Systems whilst providing increased cost reductions.

Solutions need to meet improved usability criteria, fulfil legal requirements and result in cost savings, thus be able to build sustainable relationships of trust with law enforcement organisations, financial investors, the local community, customers and staff.

The Opportunity

- 👍 To incorporate digital technology to maximise operational efficiency with subsequent space and cost savings.
- 👍 Demonstrate a proactive approach to security issues, health and safety.
- 👍 Integrate the latest security and broadband communication techniques to differentiate your site and services from the competition.
- 👍 To be able to publicly or privately report measured and controlled environment information.
- 👍 FREE standard browser software to monitor, control and manage each PTZ (Pan, Tilt and Zoom) OCTV camera.



Your Benefits

- ✓ Operational cost savings: e.g. increased automation, reduced staff training issues and smaller legal bills, releasing staff for other more productive duties through improved environment management.
- ✓ Capital cost savings: e.g. reduced equipment costs, compact archive storage and use of FREE browser software.
- ✓ Improved implementation of security policies with consequent positive PR coverage.
- ✓ Fast, efficient and interactive distribution of images to any location.
- ✓ Digital recording removes the video tape handling, storage and archiving problems and automates regulatory and legal requirements.
- ✓ Ability of HQ staff to quickly and effectively manage and control sub contractors and routine monitoring duties at distributed locations.

REMS Solution

REMS solution can Monitor, Control and Manage any system at a site to improve Environment Efficiency and deliver vital Management Information to the appropriate personnel whether they are located at the site, central office, on a mobile telephone, an internet terminal or a combination of all. The solution can be configured to automatically act upon the information, inform your staff to manually rectify the situation, record the event or an amalgamation of all three.

For Example: all OCTV cameras record images to a digital disk, 24 hours a day, 365 days a year to ensure their continuous operation is maintained. The live or recorded images can then be viewed/played back through a standard web browser from anywhere within your Intranet with the appropriate security clearance



This alleviates the need for complex user software and the training associated with such bespoke solutions with the consequent immediate saving in staff and management time and significant long term savings in capital and operational costs.

Important storage considerations of traditional Analogue versus the modern digital alternatives. For 30 frames per second TV quality recording, a videotape will be full in three hours. Three frames-per-second will fill the same tape in 30 hours and 1 frame per second the tape will last 90 hours or 3 ¾ days. Image degradation occurs if the tapes are used more than 12 times. The system also needs to be well maintained and tape heads should be replaced annually.

Hard Disks can currently store up to about 20 hours of recording at 30 frames-per-second, and almost a month's worth at one frame per second time-lapse. After this, the disk must transfer archive information to another medium such as CD ROM (630MB), DVD (8.5GB) or digital tape (100GB).

REMS Solution Plus

Additional Operational and Environment Efficiency can be gained by the effective monitoring and control of the air conditioning, lifts and escalators, secure door access or car parking facilities, fuel filling stations, battery back-up and generator systems plus individual room temperature, humidity, fire, gas and flood sensors. The REMS Solutions Plus can be used to monitor and report on the water, gas and electricity consumption permitting accurate billing or cross charging from a common source whilst achieving the economies of scale possible with single source supplies. The REMS Solution can be extended to include environmental best practices.

The REMS International solution can Monitor, Control and Manage all of the components regardless of manufacturer.

The Guild of Travel and Tourism approve REMS 25x8 Solutions and Advisory Services.



Analogue (CCTV) Vs Digital (OCTV)

Function	Analogue Recording	Digital Recording
Search and Replay	Tedious, takes hours	Instant, takes minutes
Copying	Quality Loss	Identical copies
Initial Quality	Poor to Good	Poor to Very Good
Picture Resolution	Limited to VCR Bandwidth (230 TV Lines)	Limited to Video Image
Quality Over Time	Quality Loss	No Change
Storage Capacity (1 frame per sec)	90 hours (1 tape)	1 month (Hard Disk)
Archiving	Video Tape	DVD, CD-ROM, Digital Tape
Archiving of important copy sequences	Video tape / lower quality copy / not robust	CD-ROM / identical / very robust
Printing	Expensive – Video Printer	Cheap – ink jet or laser
Playback Compatibility	Some multiplexer problems	Any Web Browser (PC)
Evidential Robustness	Traditional and accepted	New and now accepted
Automated Features	Few	Many, varied, flexible
Event-driven Recording	Limited	YES, many varied options
Time-lapse Recording	YES	YES, many varied options
Variable Camera Sequencing	Fixed	Automatically variable
Variable Frame Rates	Fixed time-lapse or Real-time	Automatically variable
Dial-up and Download Recordings	NO	YES
Playback Over Network	NO	YES
Replay While Recording	NO	YES