



# Video Surveillance



**Video Surveillance along with Intrusion Detection and Access Control are considered to be the three main elements of an electronic security system**

Video surveillance, while most often associated with security measures, can be used for a wider variety of purposes if combined with an appropriate software package. Some of the more sophisticated software packages include some level of analytics which can make video surveillance a very powerful tool.

Closed-circuit television (CCTV) is interchangeably used with the term video surveillance. CCTV differs from broadcast television in that the signal is not openly transmitted but is kept within a closed circuit which may contain one or more monitors. Signals transmitted within the closed circuit may be point to point or point to multi-point thus allowing a high degree of flexibility in monitoring activities across the network. Signals may be transmitted over a variety of media including copper wires, fibre optic cabling or wirelessly through the use of a wireless mesh system which is made up of a number of wireless access points networked together.

Video cameras, the devices that capture images come in a wide variety of designs for use indoors or outdoors, in harsh chemical environments or infra-red enabled cameras for night time use. All video cameras are connected to a storage device; typically, either a digital video recorder (DVR) or a network video

recorder (NVR). CCTV can run on a continuous basis, recording all activities within range.

of the video camera. As this tends to take up a great deal of storage capacity, more often an “exception” recording is activated by a motion, occupancy or heat sensing device. Video storage can be done on-site or off-site through a remote data centre.

Increasingly, wireless signals are deployed in combination with the internet to allow remote access to the system. These IP enabled systems are often the best choice for operations that require a high degree of flexibility in terms of monitoring premises on a 24/7 basis. If, for example the owner is not present at his place of business, they can access the video monitoring system through their cell phone over the internet or from any offsite computer with internet access.

The wide range of equipment available in the market today has enabled CCTV to be used in ever increasing applications. Security applications such as retail store monitoring and perimeter monitoring are amongst the most common applications. Combined with analytics software CCTV can be used in a retail setting to determine customer counts, and determine periods of heaviest customer traffic enabling management to adjust staffing and inventory levels to maximize profits.

High definition cameras with zoom capabilities have given rise to monitoring certain process monitoring devices such as flow meters and temperature or pressure gauges in a wide range of industries from food processing plants to SCADA operations in water treatment and wastewater treatment buildings in the industrial sector. These close monitoring activities can have a positive effect on the bottom line from both a labour and quality point of view.



For more information on video surveillance and how Fancom can help with your electronic security requirements please call us at 905-990-4845 or send an email to [info@fancomni.com](mailto:info@fancomni.com) indicating “video surveillance” in the subject line.