# Access Control



## **Applications**

- Security and Perimeter Protection
- Safety
- Traffic Monitoring
- Asset Protection
- Business Intelligence

Outstanding Detection Performance Vi-System offers high performance detection in a variety of indoor and outdoor environments. Featuring high Probability of Detection (PoD) and low False Alarm Rates (FAR), Vi-System is a reliable and accurate real-time video analytics solution, even in challenging conditions such as crowded and high traffic scenes, and adverse weather conditions. Vi-System Ver. 3.3 SP1 is i-LIDS® approved as a primary detection system for operational alert use in sterile zone monitoring applications, following comprehensive testing by the UK Home Office Scientific Development Branch.

# Access Control Systems - Introduction

Access Control Systems are designed to monitor and control people's access throughout a building or restricted area. An Access Control system involves the use of an access device which is swiped over a reader to gain access. The device can be in the form of an Access Card, Access Fob or Pin Code, but these are often accompanied by a second level of authentication by using Finger Print, Finger Vein or Retina Scanning.



#### **Access Control Hardware**

A basic Access Control system could comprise:

- Access Control Box
- Door Access Reader(s)
- Access Control Card/Fob(s)
- Maglock
- Door Sensor/Contact

#### **Access Control Box**

The Control Box is really the heart of the system. By wiring the Door Access Readers, Door Maglocks and Door Sensors to the Control box it is then able to pass information collected from the readers to a PC, where software allows access rules to be set up and information collected. A software is then installed on a PC which allows the installer to set up the system by adding users, access cards and specifying exactly how the system may be implemented. Typical options might include; scheduling when certain doors can be accessed and specifying when an access card might expire.

#### **Door Access Readers**

These are put onto every door that needs to be controlled. The Door Reader is typically connected to the Access Control Box via Wiegand (which is normally 7 or 8 wires), RS-485 (which is two wires) or via a standard CAT5 network cable. Door Readers can come in different frequencies so it is important to make sure your Access Control Cards/Fobs work on the same frequency. Common frequencies used are: 125Khz and 13.56Mhz





#### **Access Control Card**

The Access Control Card is used to gain admittance through the Door. These are often proximity cards that simply need to be swiped over or near the reader in order for them to be read and access provided. Access Cards are also used for identification purposes as you are able to print details and even a photo on the card itself. The Access Card needs to be the same frequency as the Door Reader.

#### **LPR**

Recognition of license plates is performed either using the built in Motion Dectection Engine or via IO trigger (e.g. sensor beams) meaning whenever a vehicle breaks the sensor beam, this instructs the system to capture the license plate and send an output to a gate or other IO device. The system can display the live video signal and Picture In Picture to view the last snapshot license plate the ANPR system has taken.





## **Types of Access**

The type of door access method can vary depending on the environment.

Typical Access Types could be:

- One Way Traffic Each door has a single card reader
- Two Way Traffic Each door has dual card readers (for in/out)
- Mixed Mode

## **Access Control Integration**

Access control systems are greatly enhanced once integrated with a CCTV Security System. As with the GeoVision AS200 which can integrate into the main surveillance system software, you are able to view all access logs together with the corresponding video events. Access logs and events can be inspected via the Web, and Email and SMS notifications can be sent upon certain conditions e.g. Panic Code Entered, Door Forced Open etc.



