

Video Analysis Solution Suite

# ViFence3

**Vael**sys  
Image Recognition Software



ViFence3 is high performance real time video analysis software that tells the operator which cameras are most likely to capture suspicious or dangerous activity, resulting in much more efficient and secure surveillance.

Since the system uses highly efficient monitoring technology, the human resources required for this task are optimised. A single operator can manage hundreds of cameras. In most cases, the usefulness of CCTV footage is actually forensic, i.e., after the problem has been reported, it is used as a record to demonstrate what actually happened, or to attempt to find the guilty party. In most situations this proof is of little use, due to the poor quality of the recordings, or simply because it is now too late and no action can be taken.

Video analysis clearly suggests a solution to this problem: it acts as an invisible sensor, allowing action to be taken immediately a dangerous or emergency situation arises.



# Applications

## Protecting critical and high risk infrastructures (Homeland Security)

- Government buildings
  - Logistics centres
  - Transport:
    - Airports
    - Roads
    - Train stations
  - Police and military sites
  - Frontiers
  - Power plants
  - Prisons
- Increases the reliability of large CCTV systems (monitoring events which are highly probable to be of interest)
  - Optimises or reduce the cost of security personnel (just one operator can monitor hundreds of cameras effectively)
  - Fits video analysis into existing CCTV installations
  - Defines virtual security perimeters or “tripwires” (which are invisible to the assailant)
  - Rapidly reconfigures virtual perimeters (no need for ditches or construction work)
  - Rapidly detects suspicious objects, vehicles in risk areas, etc.
  - Controls and checks up on vehicles entering and leaving
  - Controls and checks up on parked vehicles

## Protecting large civilian spaces

- Industrial estates
  - Solar farms
  - Sports centres
  - University Campuses
  - Housing estates
- Detects intruders out of hours or in restricted areas
  - Sends video to the Alarm Reception Centre
  - Centralised monitoring of several dispersed installations
  - Optimises or reduces the cost of security personnel (camera monitoring can be outsourced)
  - Reduces false alarms due to video monitoring (greater reliability and reduced cost of attending to alarms)
  - Vehicle and person recognition
  - Integrates with deterrent components (sirens and lights)

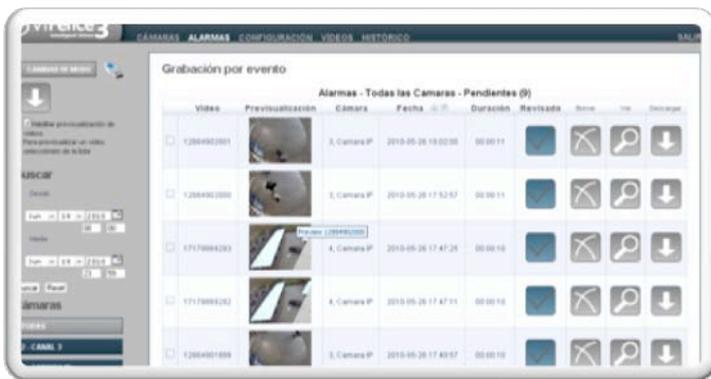
## Presence and intruder control

- Homes (detached houses)
  - Offices
  - Hospitals
  - Museums
- Rapidly detects presence and intruders
  - Availability of video removes doubt when presence or intruders are detected
  - Quickly and demonstrably detects sabotage
  - Greater convenience as alarm checking is outsourced to an Alarm Reception Centre
  - Integrates recording and analysis in a single machine
  - Greater convenience as internal security can be activated after an external alarm
  - Connects the analysis system to other detection devices
  - Sends and displays alarms after an email or SMS has been sent from a mobile device
  - Counts entries and exits
  - Estimate of attendance



## Why ViFence3?

From one camera to hundreds, from small centralised installations to large distributed complexes, ViFence is the key component in ensuring the effectiveness of any CCTV installation. Due to its scalability and modularity, ViFence facilitates integration and minimises costs by adapting perfectly to the requirements of any situation. ViFence is the simplest, most reliable and most complete video analysis system on the market.



## Principal characteristics of ViFence3:

### Intuitive Web Interface

ViFence 3 can be managed either locally or remotely via a web interface that is both complete and user friendly. No special software is required, just a recent version of a Web browser that can play Flash files (Explorer or Firefox).

### Easy to configure

Configuring zones per camera, whether locally or remotely, takes just a few minutes, thus saving time and resources. Similarly, the system can also be reconfigured, or the configuration improved on, in order to optimise results.

### Maximum performance and scalability

ViFence 3 can run on low-powered or high performance processors, providing the highest number of video channels analysed per server.

### Software solution

Based on a Linux core and a selection of secure and stable software components, this is the easiest solution to deploy and maintain, reducing any associated costs to a minimum.

### Open architecture

ViFence 3 has been designed to work with third-party solution and equipment, including cameras, video management systems and alarm reception control centres.

## Analysis functions

Video platform

# ViFence3

### ViFence Analytics

Robust algorithms for detecting and monitoring elements outside. Analytics uses some simple rules to perform multiple types of detection, thus reducing the number of false alarms to a minimum.

- Perimeter intrusion
- Vehicle parked in a forbidden area
- Presence of people in restricted areas
- Eliminating the detection of small animals
- Abandoned object detection
- Detects counter-flow activity (entering at exits)
- Loitering in foot traffic areas
- Out-of-hours presence detection

### LPR – License plate recognition

License plate recognition and management system. Access lists can be created to authorise entries or control how long a specific vehicle stays. The alert functions can be used to open or close barriers by relays, generate lists of accesses, associate alerts to maximum stay times, etc.

### Vicon C – Access counter

The Vicon C counting system provides a simple way of counting and controlling the number of people who cross a given foot traffic area. Vicon C can be used to:

- Count entries into a premises and exits from it
- Count the audience/attendance at an event
- Count foot traffic in a shop aisle
- Evaluate opening or closing times
- Analyse data per hour, day, week or month
- Export data into Microsoft Excel