



# CROWD NUMBERING

CROWD NUMBERING IS A VIDEO ANALYSIS APPLICATION THAT PERFORMS ACCURATE REAL-TIME COUNTING OF SUBJECTS PRESENT IN A PRE-DETERMINED AREA.

**CrowdNumbering** allows you to follow in real time the evolution of the number of subjects present in one or more zones that you have predetermined. Thus, **CrowdNumbering** allows to know precisely and in real time the number of people present in a meeting area or the number of cars in a parking lot for example.



## FEATURES

- Real-Time automatic People Counting
- Very fast and easy setup
- Calculation of the occupancy rate
- Integration of results in an operating interface
- Ability to detect different targets
- Use of AI
- Robust to shadow and other light artifacts
- Multiple counting points with the same camera

## APPLICATION

This solution allows the counting of different types of targets in one or more zones and to know their occupancy rate:

- Counting people in a rescue staging area
- Counting of cars in a car park, detection and counting of free spaces
- Counting of people on a station platform

## ADVANTAGE

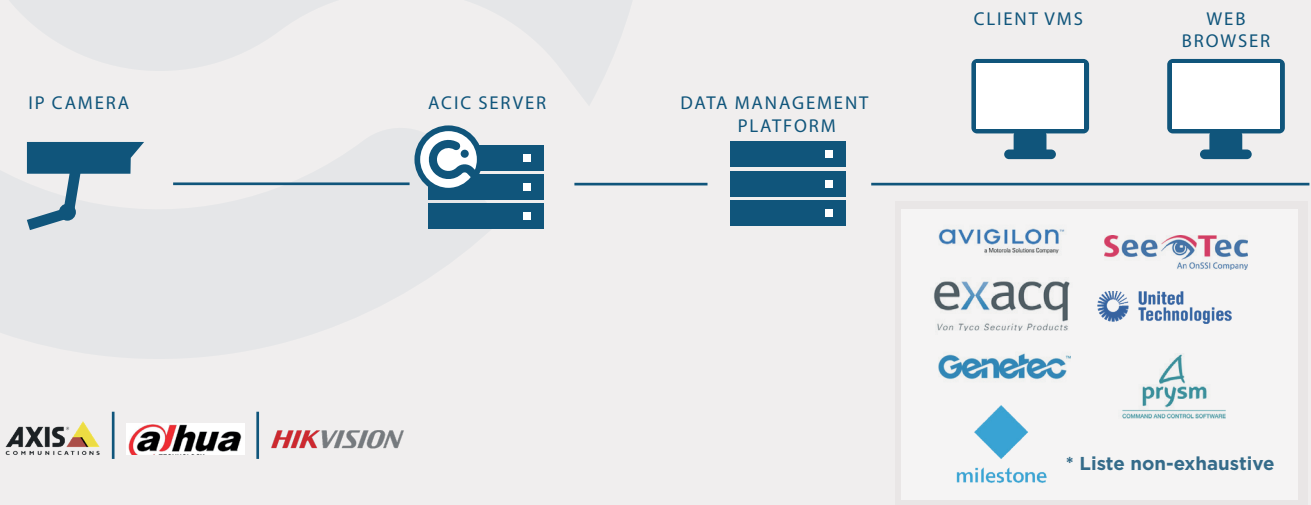
- Cost-effective solution
- High counting performances
- Data Management Platform for centralization and use of data
- Sends alarms to a VMS
- References in many sensitive projects
- Can work on existing CCTV cameras, PTZ cameras, IP cameras
- Very robust to changing outdoor conditions
- Detection of specific targets using AI
- Direct and flexible support





# CROWD NUMBERING - SOLUTION INTEGRATION

In order to optimize the use of counting results, it is possible to integrate them into the operating environment: **The Data Management Platform (DMP)**. This DMP is our interface for centralizing the counting data generated. This tool is provided as a VM (linux) and can be deployed on the analytics server. It provides an overview of a site as well as its count results.



## REFERENCE

### SNCF RER B / RER C

CrowdNumbering monitors the people density on the station platforms of the RER B (SNCF - Paris Railways). More than 750 video streams are processed allowing traffic control team to manage tense situations on the rail networks.

## PART NUMBER

|                | FEATURES:  | INCLUDED OPTIONS:   | SERVER VERSION   | EDGE VERSION  |
|----------------|--|---|--|---------------|
| <b>PREMIUM</b> | 8 zones and 2 types of objects:<br>- Head & People Counting  | <ul style="list-style-type: none"> <li>DNN / AI : 2 types of objects [List of object types available on demand (vehicle, truck, bicycle, ...)]</li> <li>Anomaly detection base : detection of basic camera anomaly : camera occlusion, loss of signal.</li> </ul> | For all cameras<br>native linux<br>Virtual machine (vmware, HyperV)<br>Gpu recommended   | Not available |
| <b>DYNAMIC</b> | <b>FEATURES [BASE]:</b><br>CROWD NUMBERING Base<br><ul style="list-style-type: none"> <li>Base of one class DNN</li> <li>People and head detection</li> <li>1 zone available</li> </ul> <b>PART NUMBER</b><br><ul style="list-style-type: none"> <li>DYN-CN-SERVER-BASE</li> </ul> | <b>ASSOCIATED OPTIONS:</b><br>DYN-CN-SERVER-OPT-AI<br>DYN-CN-SERVER-OPT-PTZ<br>DYN-CN-SERVER-OPT-ANOM<br>DYN-CN-SERVER-OPT-STAB<br>DYN-CN-SERVER-OPT-FAIL<br>DYN-CN-SERVER_OPT_ZONE   | DNN/AI objects classes Option<br>PTZ adaptation Option<br>Full Anomaly Detection Option<br>Camera Stabilization Option<br>Failover Option<br>Additional zone (max 8) |               |
|                |  | <b>ASSOCIATED PRODUCTS:</b><br>DMP-SERVER-BASE<br>HDW-SERVER-OD   | Data Management Platform<br>Appliance Server on demand   |               |