# Case Study \_



The latest technology to guarantee maximum protection

### CLIENT

Plana Fàbrega is a leading security, telecommunications and electrical materials company.

Grupo Plana Fàbrega was founded in 1967 by Joan Plana Fàbrega. With excellent foresight, he started installing video entrance phones, expanding the company and converting it into what is now Grupo Plana Fàbrega, an established company and a leader in its sector, with capacity to provide all-round services.

After 50 years, Grupo Plana Fàbrega is an established and experienced operation that collaborates closely with its clients.

Plana Fàbrega installs state-of-the-art, high-tech systems that ensure optimal protection. It has an alarm receiving centre in Barcelona delivering around-the-clock surveillance, 365 days of the year.

Permanently connected to the security forces, it controls movements detected by security systems and offers numerous associated services: video surveillance, video analysis, key holding services, security patrols...



The time has come to add something extra efficiency is essential

## **CUSTOMER NEEDS**

Video analytics solutions are becoming an increasingly important aspect of alarm monitoring centres. Video alarm verification is the most efficient method for ascertaining what has triggered an alarm and acting quickly in case of a real situation.

With so many systems existing these days, it is crucial for Plana Fàbrega to work with systems that guarantee streamlined operation within the alarm monitoring centre.

Combined with the characteristic efficacy of the DAVANTIS equipment installed by Plana Fàbrega, the time has come for boosting another key element, efficiency.

# Beyond Deep Learning

# SOLUTION

Deep learning is revolutionising artificial intelligence and it has been shown to be highly efficient applied to image analytics to understand the content and distinguish between what is and is not a human being. However, deep learning is based on deep neuronal networks that must learn from observing a vast quantity and variety of examples to be able to adapt to all types of surroundings. Even more importantly, it needs to observe high-quality, well-lit images where the subject observed is relatively large and the view is unhindered. Such conditions are rare in CCTv environments where video analytics are used, which tend to be outdoors with complex, changeable conditions. In contrast, traditional video analytics have proven highly efficient for detecting small objects moving coherently under any conditions, but it sometimes has difficulties distinguishing between people and other objects moving in the scene.

DAVANTIS has developed Deep Fusion, capable of combining market leading traditional analytics with the most advanced deep-learning-based technology.

Deep Fusion can detect all intruders in highly demanding environments and at longer distances, reducing false alarms to never-before-seen rates.

**TECHNOLOGY** 

Plana Fàbrega is extremely experienced with DAVANTIS Solutions in all types of sites.

To check the results of the new Deep Fusion solution, a total of seven sites with complex surroundings were selected.

With the same camera infrastructure and equipment used so far and, at the same time, new Deep Fusion equipment.

Maintaining the same detection level in case of real alarms caused by people and vehicles, the idea was to measure the reduction in false positives.

The results are shown in the following table:

INSTALLATION TYPES	NUMBER OF CAMERAS	REDUCTION IN FALSE ALARMS
Logistics	6	82 %
Residential	9	91 %
School	20	95 %
Residential	8	81 %
Outside warehouse	4	96 %
Residential	8	88 %
Industrial	9	92 %

An unprecedented reduction in the rate of false alarms in the industry



**Snapshot** with a box highlighting the cause of the alarm.



**Video** of the alarm at the activation point. Live access to the camera for immediate verification.

Once the alarm has been verified, the system activates dissuasive devices

### **BENEFITS FOR INSTALLERS**

- The same reliable detection with a drastic reduction in false alarms.
- Massive increase in efficiency by filtering complex environmental factors such as plants, shadows, animals, lights, spider webs and dirt on cameras.
- Optimised alarm monitoring centre resources.

### **BENEFITS FOR END USERS**

• Deep Fusion Technology that users can afford.