



SharpView Security Platform

Technology to keep you **safe**



- **3D Perimeter**
Protection of high accuracy combining sensors of different types that **remove** false alarms and **anticipates** to any intrusion

What is SharpView?

SharpView is an advanced security system that protects any perimeter reliably, **eliminating false alarms**, obtaining better results than other conventional systems at a **lower** installation and maintenance **cost**

The innovative SharpView technology is based on four main points



Geo-referencing

All the sensors can be configured in a highly accurate map



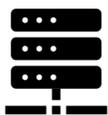
Sensor data and maps in 3D

All the information generated by the sensors is transformed in 3D coordinates including position, height and speed



Automatic PTZ camera control

Automatic accurate tracking system and classification for double verification of alarms



Management and recording of video

Reliable and efficient recording of high volumes of data from cameras and sensors

Main advantages

- Protection of wide areas with less devices
- Intelligent control of cameras and sensors
- Transform your PTZ cameras in autonomous surveillance systems
- Intelligent 3D video analytics, both in static and PTZ cameras
- Detection based on geographic areas with adjustable risk levels to eliminate false alarms
- Efficient display of activity and incidents
- Decreased number of cameras required to protect the perimeter
- Lower installation and maintenance costs
- Reduce fatigue on security guards

Workflow of the system

SharpView workflow consists on four phases





Detection

SharpView integrates sensors of any kind geo-referencing it's detections

This allows the system **removing** a great amount of false alarms

Detections are displayed on a map automatically

Radar

Buavi's **MIRAD** radar range detect intrusions in wide areas with ranges up to 3000m



MIRAD-60	60m	80m	120°
MIRAD-100	120m	160m	90°
MIRAD-300	450m	600m	90°
MIRAD-1500	1500m	3000m	90°

Detection range and horizontal coverage of MIRAD radars

Thermal Radar™

SharpView's unique technology can create a radar using any thermal camera, geo-referencing any video analytics detection



Video Analytics

Advanced classification using Artificial Intelligence and advanced movement models

Barriers, fence sensors, digital inputs and others

Any sensor can integrate useful information into the system



ALARM



ALARM



IGNORE



IGNORE

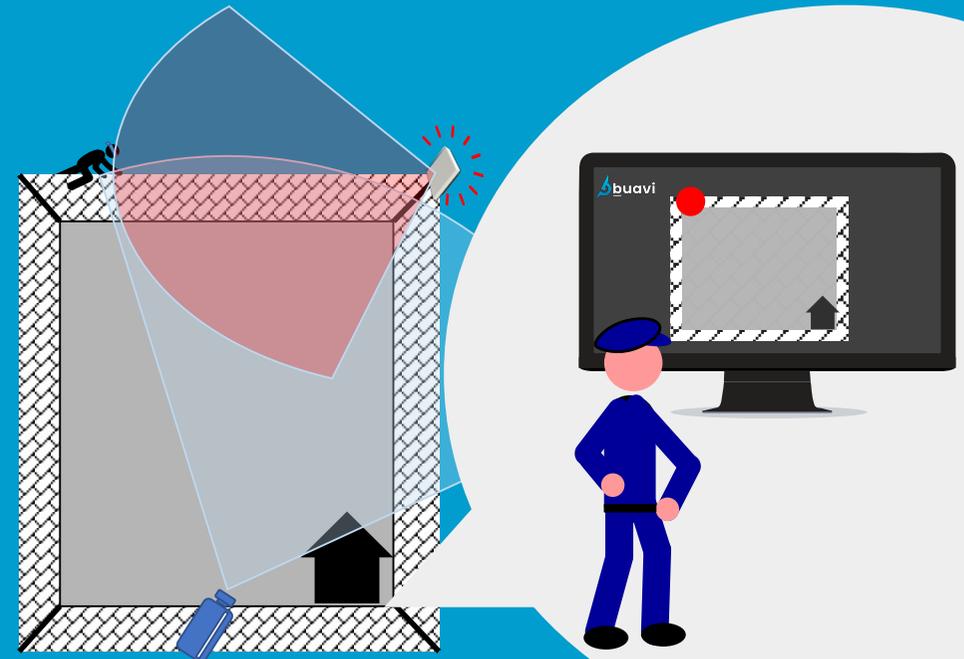


IGNORE



IGNORE

“ David, the security guard, is on duty on the guardhouse when an intruder jumps the fence. A **MIRAD** radar detects the breach and SharpView activates a pre-alarm showing on the map the exact location





Automatic Tracking

SharpView transforms any PTZ camera on an autonomous security guard

Compatible with any PTZ camera

SharpView supports any PTZ camera to track the movement

Accurate control of position and zoom

Thanks to the accuracy of the PTZ camera control the images are of the highest quality

Video Analytics on any position

SharpView is capable of analysing the scene of the PTZ camera no matter on what position it is

Point-&Shoot™ manual control with a click

At any moment a user with enough rights can take the control of the camera

Live map with the intruder position

The intruder is geo-referenced and displayed on a map in real time

SharpView optimises the available resources (PTZ cameras) based on the risk of the threat

Possible scenarios



More intruder than cameras

Tracking alternating the camera for each intruder



Same number of intruder and cameras

Each camera tracks an intruder



More cameras than intruders

Multiple cameras can track the same threat

“ SharpView starts the tracking and **directs the PTZ camera** towards the intruder automatically showing David who has activated the radar





Verification

The powerful **SharpView's Artificial Intelligence** classifies any threat at great distances using PTZ cameras

This double verification drastically reduces the transmission of false alarms

Data fusion from alarms from multiple sensors

The information from all the sensors it's combined to create higher value information and reduce detection errors

Automatic classification using video analytics with multiple classes using PTZ cameras

Multiple classes can be selected to alarm or ignore



Efficient detection

SharpView's video analytics system is extremely optimised and doesn't require big GPUs and big data centres, what reduces the implementation costs and the energy consumption

SharpView supports creating geographical areas of different types to generate alarms only when a detection is located inside a specific area. These areas can be configured with higher or lower risk, depending on the importance of each of them.

Types of areas

Detection areas

These are the areas on what we are interested and can have different risk levels

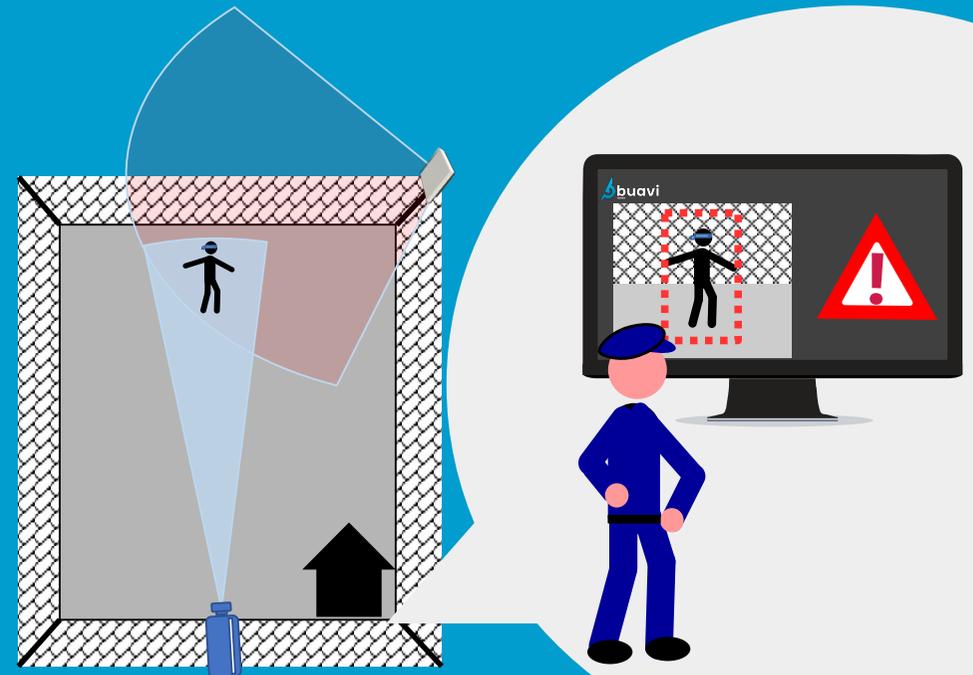
Exclusion areas or masks

Areas to ignore such as roads or public spaces

Walls and buildings

Create buildings with it's own height, to help SharpView know when a camera can see a detection or not

SharpView classifies the intruder as an alarm using the PTZ camera. David receives an alarm in the control centre





Alarm

Thanks to the **geo-referencing** and the **total control of the devices**, the alarms in SharpView contain all the necessary information to handle the incident efficiently

Rule based alarm generation

The powerful **rule engine** allows customising the alarm generation

Notifications to SharpView Manager and SharpView Mobile

Send alarms to the control centre with SharpView Manager or SharpView Mobile

Digital output activation

Activate digital outputs to interact with third party equipment like opening / closing gates or turning on or off lights

Structured arming and disarming

Arm and disarm the system, or individual devices both manually or on schedule

Multiple configurable actions

When the alarm is generated **multiple actions** can be triggered

Alarm transmission to Alarm Receiving Centres (ARC) and third party integrations

Send only filtered and valid alarms anywhere you need

Audio transmission

Send audio alarms remotely to notify the intruder you are watching

Event classification

Powerful and flexible event classification system to fulfil the requirements of any customer

An alarm includes

Location and track

Both the location where the detection started and the complete path of the intruder

Assigned cameras

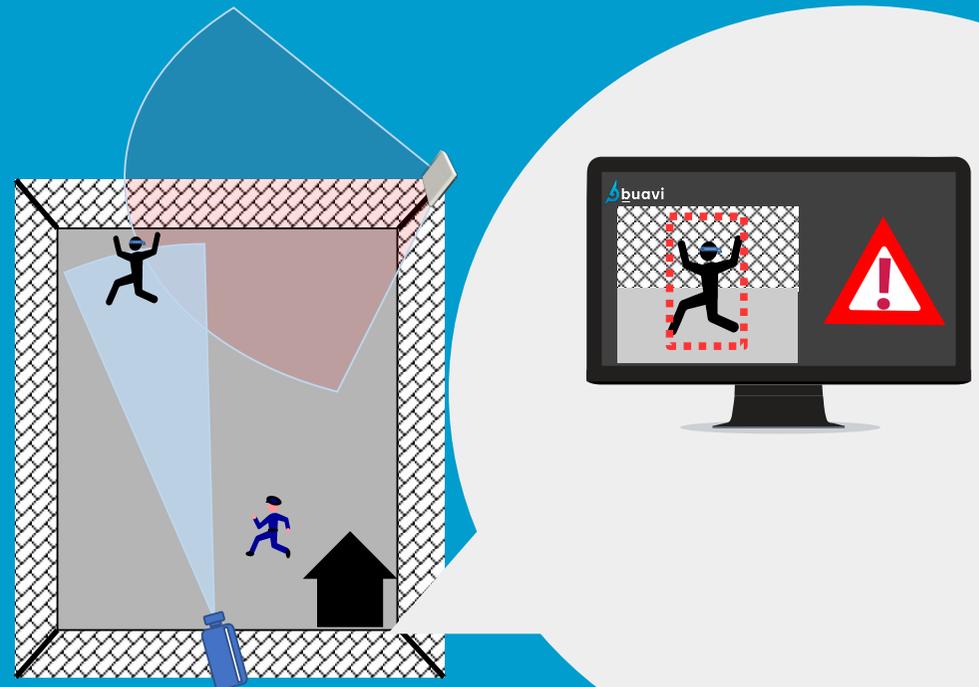
Linked video of the PTZ cameras assigned to the detection

Cameras in the field of view of the alarm

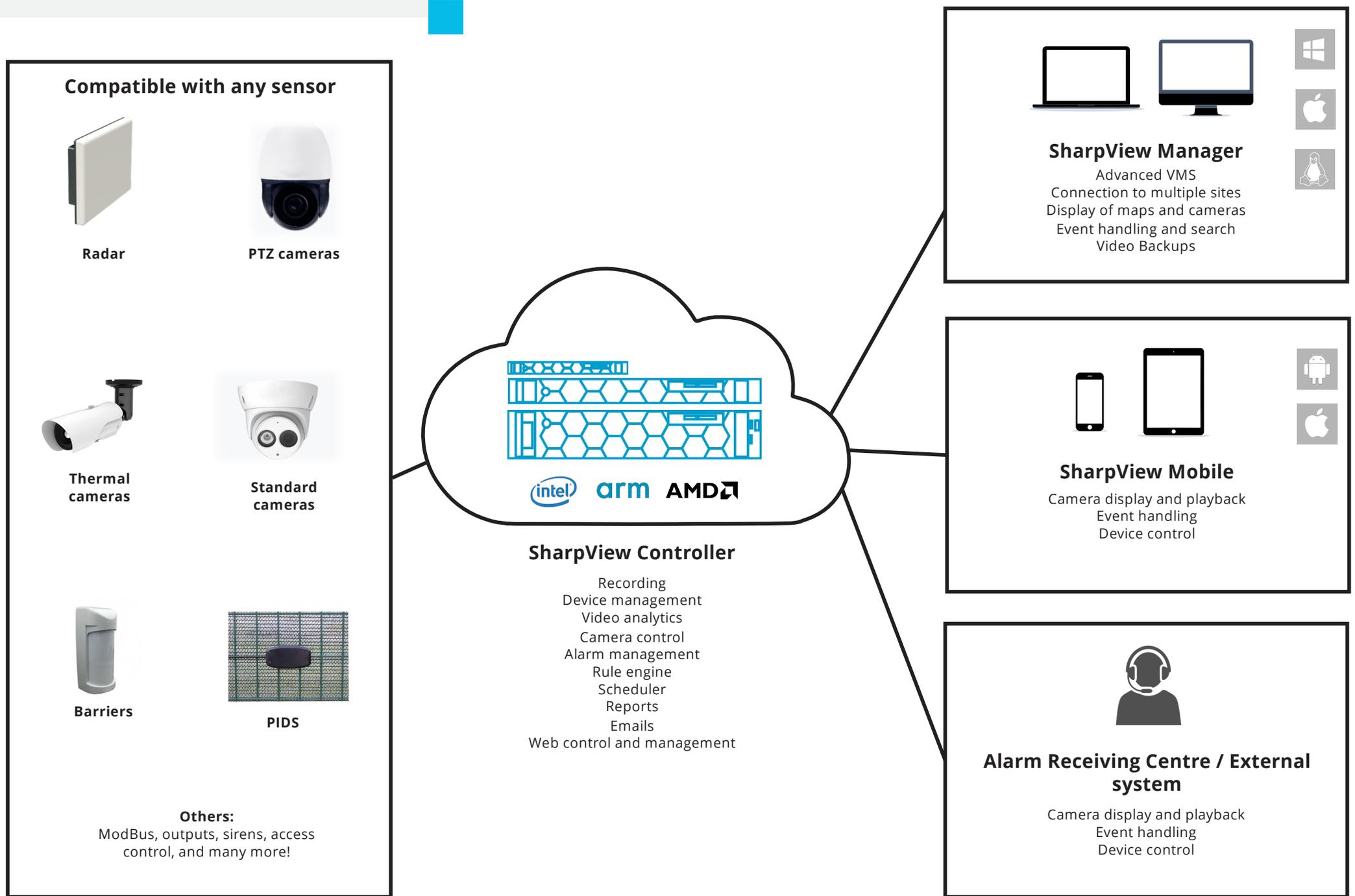
Linked video of all the cameras in the field of view of the threat



“ SharpView automatically activates the pre-established security protocol and David intercepts the intruder ”



System components



- “The value of **innovation** it's not on avoiding others to copy you, but in getting everyone wanting to copy you”

Enrique Dans

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