CIBIO-PERIMETER

CIBINAR
Ciberseguridad e inteligencia Artificia

Index

1. Software definition
2. Types
3. Software Analytics
4. Minimum requirements
5. Hardware suggestions

01. Software Definition

CIBIO-PERIMETER Is a software based on Artificial Intelligence to control intrusions.

Functions:

Perimeter control. It protects a perimeter or a determined area quickly and effectively.

Data storage. It stores the recorded data in real time, we can access it by means of an internal web through compatible and signed-in devices.

Learning. Based on AI, the software complements different neural networks to achieve an accurate and versatile result to different environments.

Notification and alarm. The lighting of floodlights or warning sound alarms can be configured so that the intruder knows he/she has been detecteded and that he/she can leave without having to resort to greater forces. If the system is connected to internet, the owner will receive notifications on his/her mobile device.

Features:

- Cutting-edge tecnology
- Differentiation between humans and animals
- Integration with other control access systems
- Up to 8 camaras from a same PC.
- Added function of generation of statistical reports.

02. Types

Different methods which have been currently used for the perimetral control are presented.

Types of perimeter security:

- CCTV surveillance systems. Control of the area through exterior cameras. An intelligent video analysis is made with the images obtained, being at the same time recorded and able to be on-side monitored or remotely for a better surveillance. You will have to consider avoiding blind spots as well as being provided with starlight cameras for the night hours (Fig. 1).
- Infrared systems. They detect interruptions by external infrared beams (Fig. 2).
- Electrostatic field disturbance sensor. Control is made by means of creating an electric field, using conductors and a ground point, so that presence can be detected when this circuit is interrupted.
- Point vibration sensor. Wireless system placed on metal fences, windows, gates and any other access point. This is activated whenever it detects vibrations on gates/windows and sets off an alarm to the central (Fig. 3).
- Seismic sensors. They are based on the vibration monitoring inside the established field of action and generating an alarm if it is disturbed. This system detects robberies through holes made to break in or robberies made with thermic lances to get through steel or concrete.

Fig.1

Fig.2

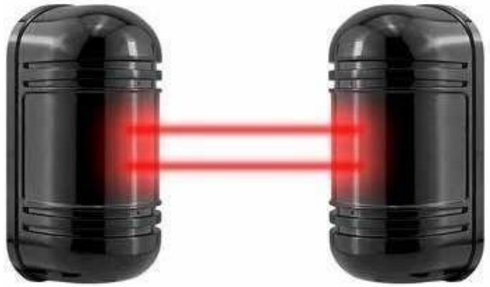


Fig.3

03. Software analytics

CIBIO-PERIMETER Is a software based on Artificial Intelligence for the control of intrusions.

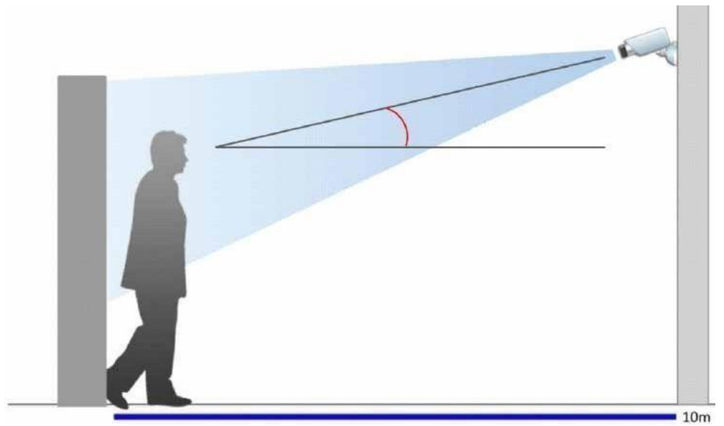
Functioning:

-Detection process. It compiles the image of the subject accessing the area.
-Pre-processing of the image. Extraction of biometric information (for the differentiation between person and animal).
-Verification process. It collates the information obtained comparing it with the restrictions given.
-Decision-making process. It alerts according to need and configuration in compliance with the restrictions given.

Operating conditions:

-Indoor, non-extreme lighting conditions, uniform lighting.
-Outdoor, a night vision function camera is recommended.
-With background lighting, it is recommended a Wide Dynamic Range/ Backgroud lighting compensation camera.
-Camera aiming at the target in an angle with a máximum of vertical deviation of 45 degrees (Fig. 1).
-Recommended camera height position in 4 meters –depending on the distance to target-.
-High image quality, at least 720p.

Fig.4



04. Minimum requirements

For the optimal functioning of **CIBIO-PERIMETER** the following components are necessary:

1 Camera (1080)	CPU: i5 8400 RAM: 8GBDDR4 GPU: GTX 1070
3 Cameras (1080)	CPU: i5 8400 RAM: 16GBDDR4 GPU: RTX 2060

6 Cameras (1080)	CPU: i7 8700 RAM: 16GB DDR4 GPU: RTX 2060 Super
8 Cameras (1080)	CPU: i7 8700 RAM: 16GBDDR4 GPU: RTX 2070

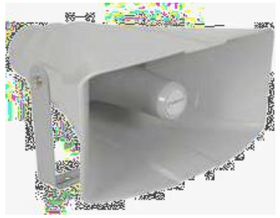
05. Hardware Suggestions

For an optimal functioning of the software, different devices are suggested.

- Camera DS-2CD2625FWD-IZS Bullet IP HIK 2.8-12mm, 2M, H265+, IR50, 12V/Po. Retail 246€ (VAT included).

adastra

- RH40V, rectangular megaphone, brand Adastra made in ABS. Retail Retail 81,29€ (VAT included).



PRODJ
www.profesionaldj.es
Lunes-Viernes: 9h-17h 968104694

6,5" (Kevlarwoofer)+ 1" (tweeter)
Bi-Amplifiied Class D LF + HF (100 + 60 W)
Frequency response: 45 Hz - 22 kHz Filtro
Spatial-acoustic filter, HF y LF
333 x 219 x 320mm

- Sai on line, Talius POW-ON1000VA SAI 1000VA UPS. Retail 265,57€ (VAT included).

PC COMPONENTES

1 USB port 2.0
2 outputsAC
Battery of 7500 Ah with 1000 VA output.
Imput frequency: 40-70 Hz
LCDscreen
Weight: 11,5kg
226 x 145 x 355mm
Port - RS-232:1
140-290 V of output operation

- LED Floodlight Projector IP65 Brico 50W 4250Lm, 30.000H Red. Retail 58,77€ (VAT Included).

GREENICE

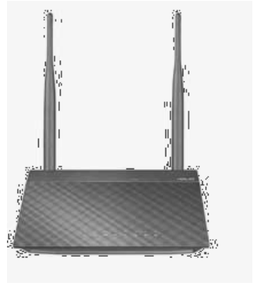
Power: 50W Input
Voltaje: AC 240 V
Brightness: 4250LM
Material: Aluminium andglass
Colour and temperature: red light (-20 a 65oC)

- Viugreum floodlight, model UFO 150W, 15000Lm, 6000K. Retail 59,99€ (VAT included).

Viugreum

Power: 50W |100W |150W
Input Voltaje: AC 240 V
Brightness: 15000LM
Material: Aluminium and PC
Colour and temperature: Luz blancafría (6600K)

- Asus RT-N12 Router/Access Point/ N300 Wireless Booster. Retail



PC COMPONENTES

(VAT included).

CIBINAR
Ciberseguridad e Inteligencia Artificial

CIBINAR

Ciberseguridad e Inteligencia Artificial