

# Overview



The Electronic-Guard Solution is a Video Security System that uses Artificial Intelligence to Protect your home and/or business.

The solution was designed and developed to protect you and your family.

The latest breakthrough in cost effective Artificial Intelligence at the Edge is the key to the success of the solution.

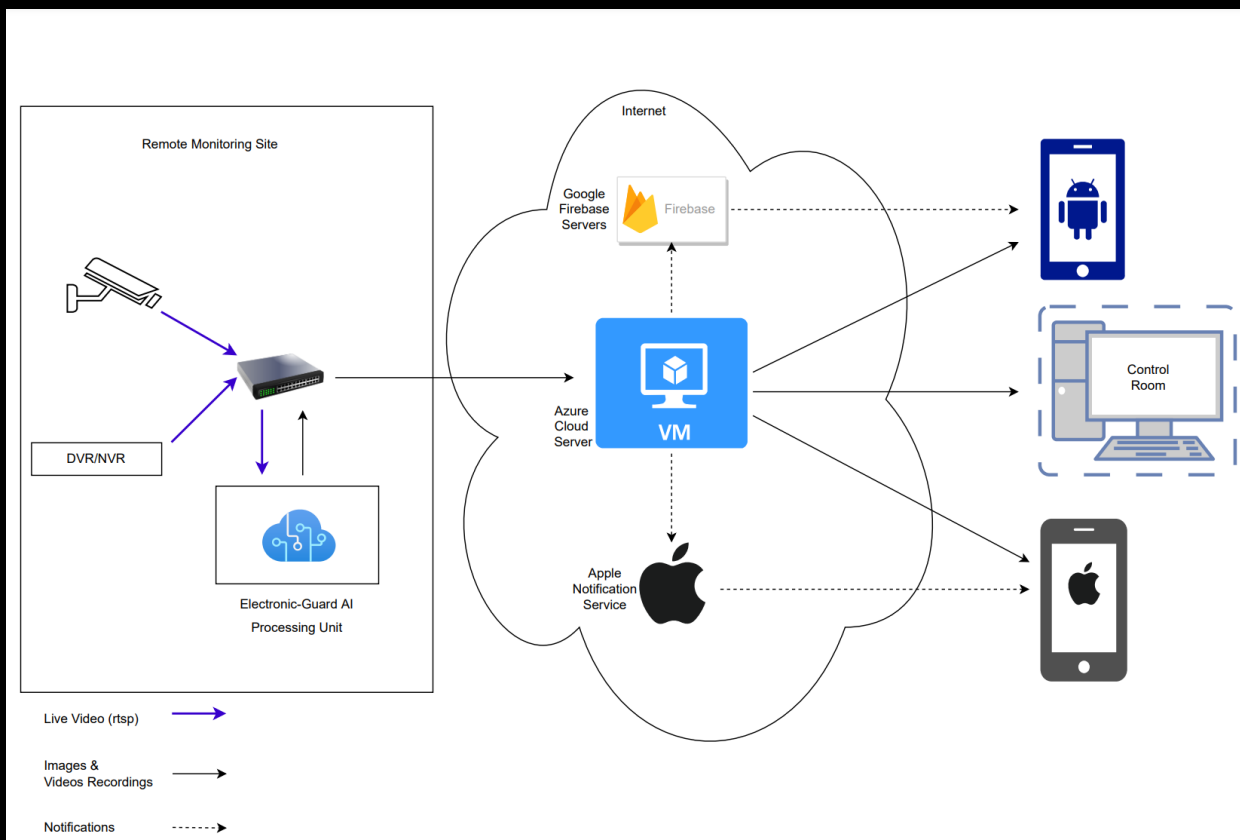
# Features



1. Advanced AI deep learning neural network for object detection at the Edge
2. Low bandwidth requirements
3. Users are notified in seconds of a detected intruder
4. Support a wide range of IP cameras and DVRs
5. Integrate to existing camera installations
6. Events are stored and time-stamped with easy review
7. Live view also displayed with the last triggered event
8. End User applications runs on most Platforms
  - Apple: iPhone, iPad
  - Android: Phones, Tablets
  - Window: PCs and Tablets

# Architecture

The Electronic-Guard AI Units runs on the remote site where the Cameras are located and where the Detections needs to be done. The high bandwidth video streams are only processes on the local network on the remote site by the Electronic-Guard AI Unit. Only detected image and short video recordings associated with the detections are uploaded to the Cloud server. The phone applications and the Control Room applications retrieve the detection images and videos from the Cloud server.



# Edge Hardware

The Edge Devices do Object Detection using Neural Networks running on Nvidia GPUs using the Cuda Core APIs from Nvidia. The Unit can trigger an Alarm/Siren or Lights with Relays available on the Unit. The Unit also supports the MQTT protocol to trigger events on Home Automation systems like Home Assistant.

The entry level Unit can run on any PC that has an Intel i5 CPU, 8G of Ram, 500Gig SSD and Nvidia GTX 1030 GPU and it can support up to 16 Cameras.

The Business Unit that is based on the Intel® NUC 11 Enthusiast Kit with a Nvidia Geforce RTX 2060 can support up to 56 Cameras:



# Detections

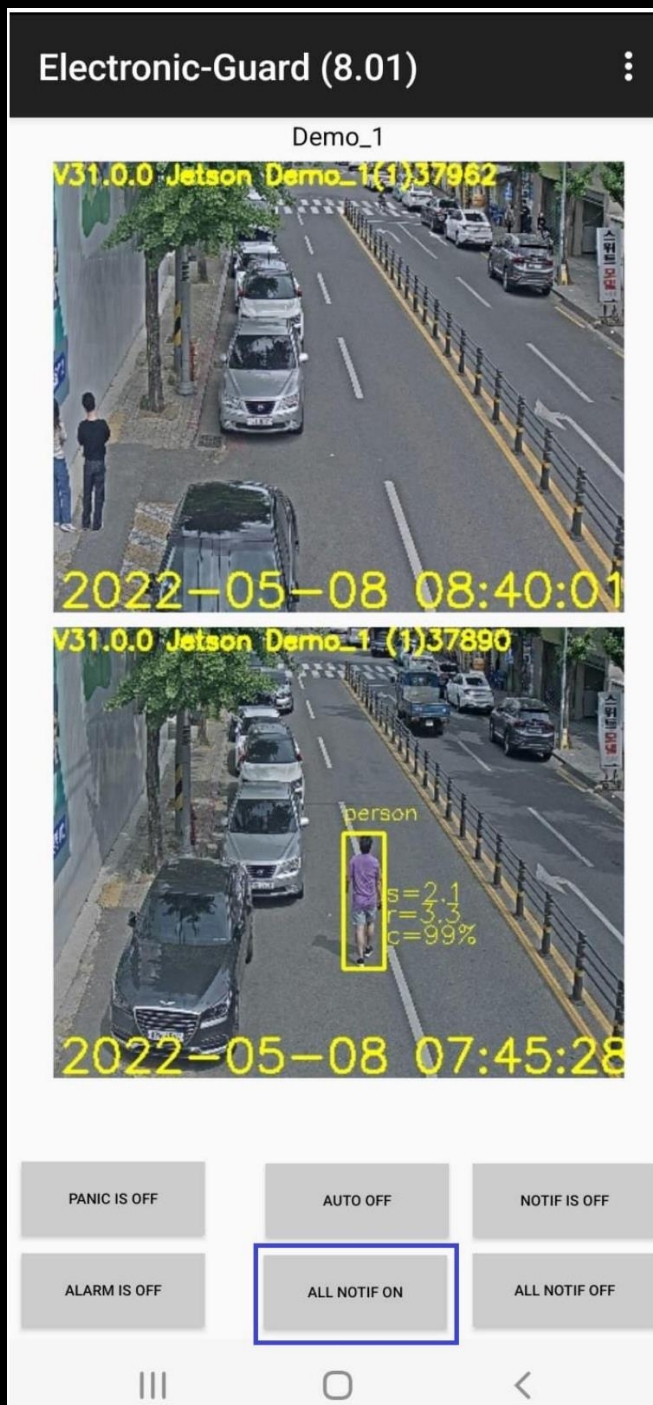
Each Camera can be configured to detect any or all the following objects:  
person, car, truck, motorcycle, bicycle, cat, dog, bird

The detections can be configured per Camera based on the required Neural Network Confidence Factor and the area of Interest.



# Phone App (iOS and Android)

The phone applications are triggered with Push Notifications on the Detection of Objects. It will take you to the Camera with the latest detection when the application is opens after receiving a Notification. The Alarm/Siren can be activated from the Phone application. The application also supports a Panic Button that will trigger the Alarm/Siren when required.



# Control Room Application

The Control Room application switches automatically to the latest detection of all the units selected to be monitored. The Detection object will be displayed on the left and the live view of what is currently happening on the remote site. The associated video that includes a few seconds before the detections is available for review. The list of detections is available on the left side and the reviewed events will change color so the operator will see what events are still to be reviewed. There is an audio alert on a detection that will draw the operator's attention during an intruder detections.

The screenshot shows the Control Room Application interface. At the top, there are controls for 'Auto Account Switch Is OFF' and 'Click to Pause'. Below this is a search bar and a 'Live Video Feed' button. The main area is divided into two video feeds. The left feed shows a person in a dark suit walking across a blue patterned carpet in a lobby. A yellow bounding box is drawn around the person, with text indicating 'person', 's=2.4', 'r=3.3', and 'c=97%'. The timestamp '2022-11-06 14:54:32' is displayed at the bottom of the feed. The right feed shows the same scene at a later time, '2022-11-06 14:55:32'. On the left side, there is an 'Event History' table with columns for 'Camera Descri...' and 'Date Time'. Below the table are buttons for 'Show All' and 'Show Less'. At the bottom, there are navigation controls for 'Latest', 'Event', and 'Image', along with a 'Device ID #'.

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# Supported Camera System



**WE CONNECT AND SUPPORT MOST CAMERA SYSTEMS INCLUDING THESE:**

1. HIKVISION
2. DAHUA
3. UNIVIEW
4. PROVISION
5. HILOOK

**CALL US NOW FOR MORE INFORMATION**

The unit process the video cameras streams from the Camera systems based on RTSP (Real Time Streaming Protocol). This is supported by most of the Camera systems including the following:

1. HikVision / HiLook
2. Dahua
3. UniView
4. Provision / TVN



Contact us



WE HAVE  
YOU  
GUARDED

● @electronic guard



## ELECTRONIC-GUARD

The Electronic-Guard solution is a cloud based Artificial Intelligence Deep Learning video security solution for the home or small business owner. The Electronic-Guard Artificial Intelligence (AI) solution was designed and developed to protect you and your family.

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