

CONNVAS MAGIC DETECT

AI-Powered Edge Detection System

ConnVAS
Sensing the future

AI-powered
video detection



Overview

ConnVAS-MAGIC-Detect is an AI-driven edge detection system that monitors the environment, identifies events in real-time, and activates alerts or responses based on predefined zones and logic. The solution is fully standalone, mounts on existing or new poles, and supports both AC and solar power.

It can also supply real-time and historical cloud-based analytics including short video clips. Data retention and PII storage follow user-configurable privacy settings.

Description

MAGIC-Detect is built around the ConnVAS pico-MAGIC edge computer with internal AI processing capabilities. It monitors predefined zones, detects pedestrians, vehicles, bicycles, and various environmental events, and triggers alerts according to the user's configuration.

The device operates as a standalone detection system or pairs with ConnVAS Alert units for a full physical-alert solution. The system supports customizable detection zones, low-latency triggers, and false-positive mitigation algorithms.

Key capabilities include RF-based triggering, cellular notifications (SMS/Call), remote power control, health monitoring, and optional cloud analytics with short event video clips.

Key Features

- Standalone system mounted on pole or wall
- Passive detection at the edge for ultra-low latency use-cases
- 95% detection accuracy
- Activate multiple triggers/alerts over RF and over cellular (including text message and phone call)
- Remote power on/off control
- Full analytics capabilities, including short videos of different events (optional)
- Remote management & system health info over cellular
- Flexible detection zone configuration and algorithms designed to mitigate false positives
- Solar and AC powered options

Use cases

- 1 Passive detection & activation at midblock crosswalks and other non-signalized crossings
- 2 Integrates with industry-standard RRFBs
 - RRFB retrofit
 - New RRFBs/crosswalks
- 3 Highway and intersection analyze and alert
- 4 Real-time AI video detection and alerts for security use-cases, such as schools and critical sites

Included in the package

- ✓ 1 IP66 Waterproof Box Enclosure; 210mmx210mm; wall mount or pole mount
- ✓ 1 ConnVAS pico-MAGIC edge computer
- ✓ 1 ConnVAS RF interface board
- ✓ 1 Power on/off remote control
- ✓ 1 camera (IR optional)
- ✓ 1 cellular router
- ✓ Maintenance + remote system health info (monthly fee)

Optional

1 solar panel + batteries
Data analyzer package (monthly fee)