

Anti-Drone Shield

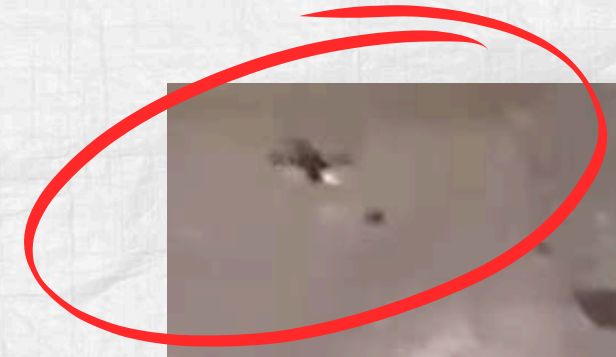
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Threat

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The biggest threat of our time: Kamikaze FPV Drones...

Kamikaze FPV drones have become one of today's biggest security threats with their low cost, high maneuverability and direct attack capabilities.

Critical military facilities, military vehicles and strategic infrastructures are at great risk from sudden and effective attacks by these drones.



Threat

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Solution

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Anti-Drone Shield Project

The **Anti-Drone Shield** project aims to prevent threats from kamikaze FPV drones to critical military facilities and strategic infrastructures.

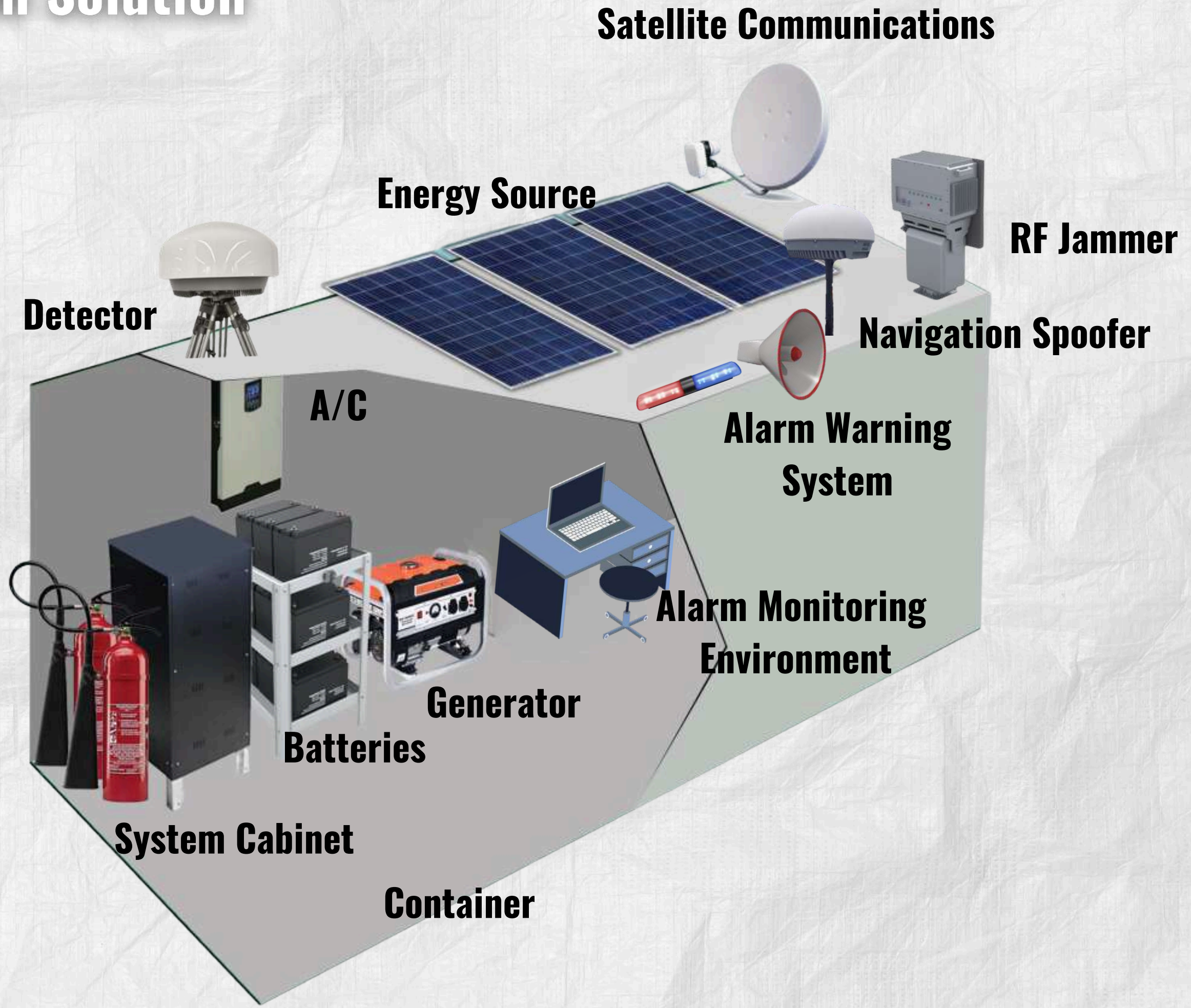
The system offers an integrated solution that detects drones and neutralizes them by jamming their signals.

It can communicate with the command and control center uninterruptedly via satellite communication and can operate sustainably with solar energy.

With its portable and quickly deployable structure, it provides security even in isolated areas.



System Solution





General Features

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- **FPV Drone Detection:** Detects approaching threats created by drones and provides immediate intervention.
- **RF and Navigation Signal Jamming:** Disables drones by jamming RF control and navigation signals and ensures loss of drone control.
- **Sound and Light Warning Systems:** When a drone is detected, sirens and light warning systems that are automatically activated within the facility inform personnel immediately and ensure that security measures are taken quickly.
- **Alternative Communication with Satellite Communication:** While the satellite communication system provides security against drones, it also provides an alternative and backup communication channel in case of an interruption in the unit's communication. In this way, the connection with the command control center can be maintained without interruption.



General Features

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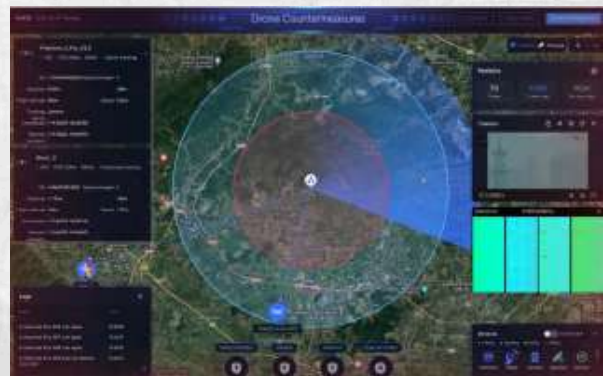
- **Solar Powered:** Provides energy independence thanks to solar panels and lithium-ion batteries and offers uninterrupted operation even during power outages.
- **Autonomous and Portable System:** Suitable for emergency response and mobile operations thanks to the fact that all components are portable and quickly installed in the container.
- **Secure Communication:** Can be managed with encryption device and central control software. In this way, the system protects security and information integrity.
- **Real-Time Alarm, Reporting and Warning:** When a drone is detected, an automatic audio and light warning system is activated and also sends instant data, reports and alarms to the command center.
- **Critical Infrastructure and Military Facility Security:** Provides continuous and effective protection for the security of military facilities, border areas, nuclear power plants and other critical infrastructures.



Alarm Monitoring Environment

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- **Drone Detection:** Provides real-time drone data including position, altitude, time, and frequency.
- **Real-time Alerts:** Sends sound and light alerts when a drone is detected.
- **Visual Interface:** Displays drone and device locations on a map.
- **Flight History Recording:** Records drone flight history for playback.
- **24/7 Unattended Defense:** Automatically engages defense plans when drones are detected.
- **Manual Interference:** Allows manual interference to disrupt drones.
- **Remote Operation:** Supports remote control and system calibration.
- **Whitelist/Blacklist Management:** Manages friendly and hostile drones for appropriate defense actions.





Detector

Radio drone detection equipment identifies radio signals from drones, providing functions like drone detection, early warning, model recognition, and positioning. It uses radio spectrum analysis and protocol analysis to detect and report drone and pilot locations, as well as drone quantities.

Key Features:

- **Passive Detection:** Receives signals passively without emitting, ensuring high concealment.
- **Comprehensive Model Recognition:** Identifies popular consumer drones like DJI, Autel, FPV, and WiFi drones.
- **Blacklist/Whitelist:** Differentiates between friendly and enemy drones.
- **Drone and Pilot Positioning:** Locates drones and pilots using a single or multiple devices through cross-positioning.
- **Strong Adaptability:** Operates in harsh conditions (fog, heavy rain) and supports 24/7 continuous work.
- **Unattended:** Automatically records detection time, drone/pilot location, and altitude.

Technical Specifications:

- **Frequency Range:** 300MHz ~ 6GHz
- **Response Time:** ≤ 2 seconds
- **Detection Radius:** 5-10 km
- **Swarm Detection:** Max 40 drones simultaneously





RF Jammer

Directional radio jammer transmits radio signals to create an electromagnetic shield in a specific area, cutting off the control link, image transmission link, and navigation link of drones. This causes the drone to return, land forcefully, or hover, preventing it from entering the controlled area.

Key Features:

- **Comprehensive Models Interference:** Cuts off navigation signals, control signals, and image transmission signals of popular consumer and industrial drones, including FPV, etc.
- **Complete Navigation Coverage:** Supports multiple navigation systems, including GPS, GLONASS, BDS, Galileo.
- **Optional Jamming Frequency:** Can transmit single or multiple jamming frequencies.
- **High Adaptability:** Suitable for use in various complex environments, waterproof and dustproof.
- **Stable Interference:** Capable of continuous interference and sending strong jamming signals.
- **Built-in Gimbal:** High-speed gimbal for full 360° target tracking.



Technical Specifications:

- **Operating Frequency Bands:** 400 MHz, 800 MHz, 900 MHz, 1.2 GHz, 1.4 GHz, 1.5 GHz, 2.4 GHz, 5.1 GHz, 5.4 GHz, 5.8 GHz
- **Interfere Distance:** 3 km
- **Interference Response Time:** 3 seconds



Navigation Spoofer

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UAV navigation spoofing devices use satellite signal simulation to disrupt drone navigation, causing them to land or deviate from their course. They prevent drones from taking off or entering controlled areas, countering multiple UAVs effectively.

Key Features:

- **Wide Range:** Affects most civilian UAVs using satellite navigation.
- **Comprehensive Signal Coverage:** Supports GPS, GLONASS, BDS, and Galileo to counter dual/multi-mode UAVs.
- **All-weather Working:** Functions well in rain, snow, fog, and other harsh conditions



Technical Specifications:

- **Transmission Frequency:** GLONASS/GPS/BDS/Galileo



Satellite Communication

- **Satellite Internet:** 20 Mbps/3 Mbps
- **Satellite Telephone Switchboard:** 100 Subscribers
- **Wifi Access Point:** 1
- **Fixed Satellite Telephone:** 2



Energy Source

- **Solar Capacity:** 2400W
- **Solar Panel Wp:** 500Wp
- **Battery Capacity:** 12V 200Ah
- **Smart Inverter:** 1000W
- **Generator:** 650KVA





Switch/Router/Encryption Device

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Switch:

- 8-port gigabit Ethernet switch, PoE supported (optional)
- Suitable for LAN network, (for detection, jammer, spoofing and satellite modem connections)

Router:

- Ethernet ports: 4-6, gigabit speed
- WAN/LAN configuration, firewall enabled
- VPN, remote access and management supported

Encryption Device:

- AES-256 bit encryption supported for data encryption
- Intrusion Detection/Prevention enabled



Silent, swift, and invisible—drones represent one of the greatest threats to modern security.

The **Anti-Drone Shield** is our strongest line of defense against these hidden dangers, protecting our critical facilities before the threat can even reach.

Every drone is a risk, every second an opportunity. With this shield, we take control of the skies and secure our future.

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