ReDrone - Counter Drones System

Detects, Identifies, Locates and Defeats Drones in All Relevant Commercial Frequency Bands



Overview

The ReDrone was developed in response to the rapidly growing use of commercial drones and quadcopters for hostile and terror activities, and the need to protect sensitive locations, VIPs and friendly forces. The system can detect, identify, locate and neutralize commercial drone threats in real-time, delivering exceptionally effective countermeasures for civilian, HLS, military and paramilitary defense. The ReDrone system has been developed using sophisticated, field-proven SIGINT and EW technologies to create a two-level solution that provides options for both short and long-range protection, making it ideal for use in multiple scenarios, including the defense of borders, airports, strategic facilities, public events, convoys and VIPs.



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Highlights

- Detects, identifies, locates (DF), and neutralizes drones in all relevant commercial communication frequencies
- Passive detection and pointing for both the drone and its operator's direction
- Detects and neutralizes multiple drones and their operators simultaneously
- Low electromagnetic interference; transmits reactively only when drone is detected
- Integrated display for local command post/user interface
- Tailored solution for customer's requirements
- Fast deployment
- Easy to operate
- · Various configurations (portable, vehicular, Man-pack)

ReDrone is available in two levels, a pure SIGINT solution or an integrated system that includes SIGINT plus additional systems such as radar and electro-optical systems.

Key Features

- Passive Detection and Selective Defeating: transmits only when drone is detected
- Detects and defeats drones in all relevant commercial communication frequencies
- Optional addition of radar system (3-4 km detection range) and EO/IR (1 km classification range)
- Single drone and swarm detection and defeating capability
- Detection and Direction Finding (DF) of the drone and the remote control
- Optional configurations: portable, quick deployment, stationary, mobile
- · Cost-effective
- Field-proven technology

Level One - A Pure SIGINT Solution

As a world leader in SIGINT, Elbit Systems EW and SIGINT -Elisra (Elisra) has developed a pure SIGINT detection solution that delivers clear technological advantages. Its fast, wideband receivers scan, identify and classify target drones; an advanced Direction Finding system points to the target; and smart, powerful reactive jamming capabilities defeat both the drone's communication link as well as its GPS receiver. Lightweight, compact, transportable and customizable for any scenario, the ReDrone has a 360° coverage and can detect and defeat single or multiple drones simultaneously. As a passive system with reactive jamming, the system transmits only when a drone is detected. Once detected, an automatic alert is sent, and the process of neutralizing the drone's navigation and communication capabilities begins. Easy to operate, the sophisticated control system enables both recording and debriefing.

Level Two - Comprehensive Defense

Since there is a growing global need to neutralize drones at longer ranges, Elisra also offers a second level option that delivers both short and long-range security against drones. The second level solution enables the interfacing of Elisra's cutting-edge SIGINT solution with additional sensors among them radar, a VISINT system with integrated IR camera, as well as an acoustic system. This combined system operates at extended ranges of up to 4 km for identification and defeating, thus delivering a complete and powerful response for a wide range of scenarios.

