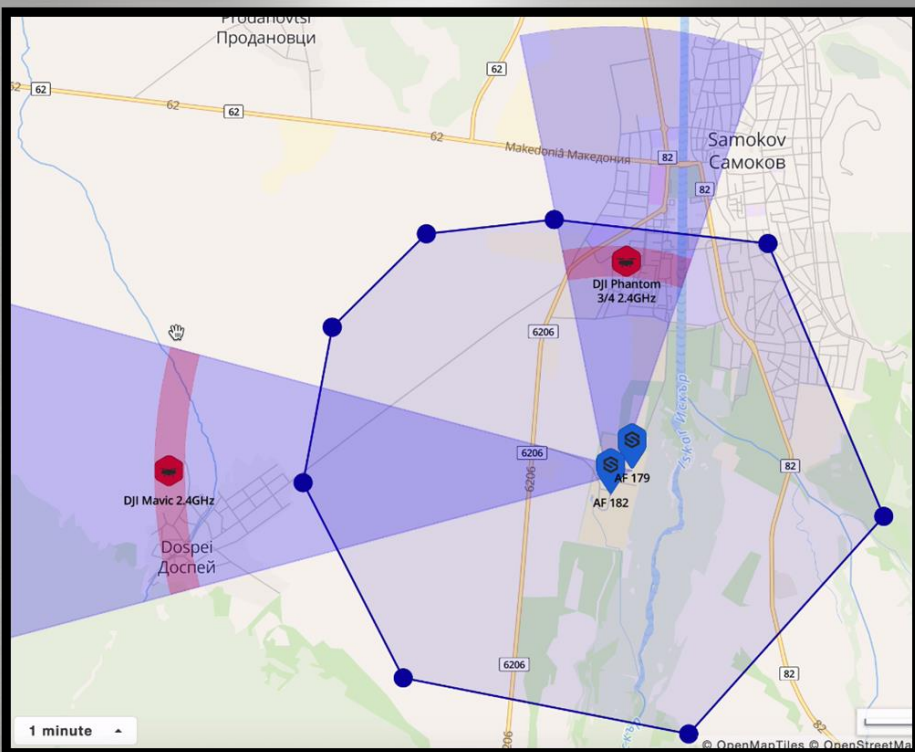


# SAMEL 90

## *Drone RF detection and jamming system* *Flexible architecture, easy deployment in any area,* *network connectivity*



*Detection is based on the radio frequency detection of the uplink and downlink frequencies of the communication channels between the drone and drone remote control station*

### *Composition of the system*

- *Drone detection sensor - RF detector*
- *Jamming system*
- *Operator work station (PC or laptop)*
- *Command and Control Software*
- *Option for integration of other type sensors and systems*

### *Installation*

*Option for stationary and mobile installations (including operation during vehicle movement)*

*Minimum installation time of the system in stationary and mobile variants*

### *Type of the RF sensor*

*Fully passive sensor*



*Drone detection range*

*Up to 8 km independently from drone size*

- *Possibility for detection of the drone operator position*
- *Possibility of the drone tracking after detection*

*Available information about the detected drones*

- *Type (model) of the drone*
- *Drone ID*
- *Time for the first and last detection*
- *Distance in km*
- *Geographic coordinates*
- *Altitude*
- *Detected frequency*
- *Communication protocol*

*RF detection method advantages*

- *Long detection range in 360° simultaneously for unlimited number of the drones*
- *Fully passive (no any RF transmissions) device*
- *Detection and targeting of the drone/drones with different speed and altitude of flying*
- *Possibility for detection of the pilot/s allocation and drone/drones home position*
- *Guaranteed detection in any weather conditions during the day and night*
- *Extremely low consumption*
- *Low size and weight (total < 45 kg)*
- *Technically and Cost effective solution*
- *RF Sensor is working without pant-tilt devices and rotating parts*
- *Detection and targeting of the drone/drones is without operator intervention*
- *Detection and targeting of the drone/drones with different speed and altitude of flying*

*RF frequency detection zone*

*360°*

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<i>Frequency bands for detection and jamming</i>	<ul style="list-style-type: none"><li>• 433 MHz</li><li>• 915 MHz</li><li>• all types navigation satellites bandwidths</li><li>• 2400-2500 MHz</li><li>• 5800 MHz</li><li>• Option for other frequency bands</li></ul>
<i>Jamming system output RF power</i>	<i>Depending from the end user requirements</i>
<i>Type of jamming system antennas</i>	<i>Directional and/or omnidirectional antennas</i>
<i>Jamming distance</i>	<i>Up to 6 km for all types drones</i>
<i>Systems parts installation</i>	<i>Two Peli type briefcases</i> <i>Total weight of the whole system &lt; 45 kg</i>
<i>System design</i>	<i>According to the military standards</i>

## *RF signals which Anti Drone System detected:*



- **UPLINK signals**
  - *Signals for the drone remote control that can be Wi-Fi, Bluetooth or own signals - most often FHSS (Frequency-hopping spread spectrum)*
- **DOWNLINK signals**
  - *Telemetry signals from the drone*
  - *Video data (analog PAL/NTSC, Wi-Fi or own protocols)*
  - *GNSS data for the drone and pilot (for example GPS, Gallieo, GLONASS,, Beidou, etc)*