COUNTER-DRONE & ROBOTICS · DETECTION & CLASSIFICATION

D-DOME

L1 Layer · Airspace

Multi-sensor drone detection that fuses radar, RF, Remote ID and EO/IR into one threat score, and alerts your control room early.



KEY BENEFITS

01 **See it early**
Long-range detection gives your team time to act before the drone arrives.

02 **One clear threat score**
Every sensing layer fused into a single probability, with minimized false alarms.

03 **Uses what you already run**
Works with existing cameras, the AI-EYE trailer or a fixed mast, and feeds your C2.

HOW IT WORKS

01 **Sense**
Radar, RF, Remote ID and EO/IR cameras watch the airspace through 360°.

02 **Correlate**
The soft-logic engine cross-checks signals, identity and flight behaviour for each target.

03 **Score**
Each target gets a level: likely friendly, suspicious, high risk or probable hostile.

SPECIFICATIONS

System type	Multi-layered aerial threat detection and classification
Detection range	Up to 5 km (radar dependent)
Detection types	Radar, RF signal analysis, EO/IR cameras (optional), acoustic sensors (optional)
Radar	X-band / Ku-band (configurable), 360° azimuth coverage
RF detection	Wideband scanning 300 MHz, 6 GHz (configurable)
Tracking capacity	Up to 200 simultaneous targets
Classification	AI soft-logic engine, probability-based threat score in 4 levels
Video analytics	Any existing IP camera via ONVIF / RTSP; drones up to 2 km with long-range optics
Integration	C2, VMS, PSIM, radar, cameras, non-kinetic systems
Communication	IP / fibre / 4G / 5G / satellite (optional)
Operating conditions	–20 °C to +55 °C · IP66
Power supply	AC 110/220 V · DC · solar (optional)

04 **Alert**
Operators receive the track, the video and the score in C2, VMS or PSIM.

05 **Respond**
Your team decides, with integration to authorised countermeasures.

Deployment	Fixed · mobile (AI-EYE IN THE SKY trailer) · rapid deployment
Trailer version (ALERT NOW)	Coverage up to 3 km · up to 8.5 days of operation · solar + battery
Compliance	CE, RoHS (other certifications on request)

TENDER SPECIFICATION TEXT

1. GENERAL

The system shall be D-DOME by D-FENCE Electronic Fencing and Security Systems Ltd. (ISO 9001:2015 certified quality management), or an approved equivalent that meets every requirement in this section.

2. FUNCTION

Multi-sensor drone detection that fuses radar, RF, Remote ID and EO/IR into one threat score, and alerts your control room early.

3. THE SYSTEM SHALL PROVIDE

- **Radar tracking:** Continuous tracking of location, speed and flight path, 360° in azimuth.
- **RF signal analysis:** Detects drone control links across 2.4 GHz, 5.8 GHz and 900 MHz and flags protocol anomalies.
- **Remote ID:** Reads the identity, position and telemetry broadcast by compliant drones.
- **AI vision:** EO/IR cameras detect, classify and track drones and their approach vectors.
- **EMF analysis:** Flags abnormal electromagnetic signatures that may indicate advanced payloads or non-standard systems.
- **Behaviour analysis:** Trajectory, loitering and approach patterns toward sensitive zones.
- **Fibre-optic drone indicator:** A radar target with no RF signal is flagged as a suspected fibre-optic drone.
- **Camera tamper detection:** Existing cameras report blinding, laser dazzle, signal blocking and jamming.
- **Open integration:** C2, VMS, PSIM, radar, cameras and authorised non-kinetic systems.

4. TECHNICAL REQUIREMENTS

- **System type:** Multi-layered aerial threat detection and classification
- **Detection range:** Up to 5 km (radar dependent)
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5. DETECTION SEQUENCE

1. **Sense:** Radar, RF, Remote ID and EO/IR cameras watch the airspace through 360°.
2. **Correlate:** The soft-logic engine cross-checks signals, identity and flight behaviour for each target.
3. **Score:** Each target gets a level: likely friendly, suspicious, high risk or probable hostile.
4. **Alert:** Operators receive the track, the video and the score in C2, VMS or PSIM.
5. **Respond:** Your team decides, with integration to authorised countermeasures.

6. SUBMITTALS

Before installation, the contractor shall submit the manufacturer's datasheet, the installation instructions and the zone layout for approval.