

RADAR DIVISION

NO-DRONE

Airport safety and security system



A radar based gap-filling surveillance solution for airports, enabling implementation of UTM concepts

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IDS
INGEGNERIA DEI SISTEMI

NO-DRONE

Situation at present

The use of UAVs or Drones is becoming more and more common place in the civil domain. With their increasing availability and reduced costs, they are no longer just operated by major defense bodies, but also by other professionals and amateur hobbyists who are often unaware of, or ignore, regulations and basic aviation safety requirements, therefore causing potential risks to aviation.

Proposed solution

NO-DRONE is an integrated system aimed for detecting, tracking, identifying and classifying cooperative and non-cooperative drones flying in the proximity of airports. It is a radar based system that detects and locates all classes of fixed wing and rotary drones

It provides continuous operation with all-weather day and night full line of sight 360° coverage.

The radar system can also be upgraded with an optional EO/IR turret for visual verification. This is fully integrated into the system to enhance the identification and recognition capabilities of the system.

The system can either be installed in a fixed location to provide permanent or semi-permanent protection or mounted on a trailer or vehicle for rapid temporary deployment.

The safe and smooth deployment in the airport environment is further enhanced by the use of the long established IDS EMC/EMI (electromagnetic compatibility / electromagnetic interference) simulation tools for predictive assessment of possible interference between various radiating and receiving elements around the airport. This models any potential inference with and from any existing NAVAIDS and COM equipment, allowing the operations personnel to locate the system so as not to impact on safety of operations, and at the same time maximize Radar coverage.

NO-DRONE integrates the latest IDS simulation software for deployment support in its command console.

Features

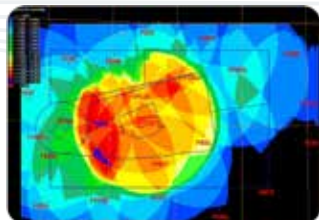
- Full line of sight 360° coverage of the aerodrome
- Multi-target radar tracking
- Target recognition, identification and classification
- Can be fully integrated with complimentary technology (RF, Optical, etc.)
- Surveillance of airport movement areas, runways and approach/departure paths
- Cooperative setup with the airport environment (EMI/ EMC analysis)
- User-defined selection of radar sector blanking areas
- Uses a standard data format such as Asterix
- Interoperability with ATC Systems

Benefits

- Control of sensitive and high risk areas when drones enter protected airspace.
- Extended surveillance capability in a “fill the gap” turnkey solution as a key-element for greater situational awareness
- Increased safety for personnel and continuity of operations
- New security paradigm for critical asset protection
- Evidence collection for forensic and investigation support
- Scalability and modularity providing reconfiguration to the customer's evolving requirements
- Added value from its Unmanned traffic management-ready architecture



Radar System



Electromagnetic tool for deployment support

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