

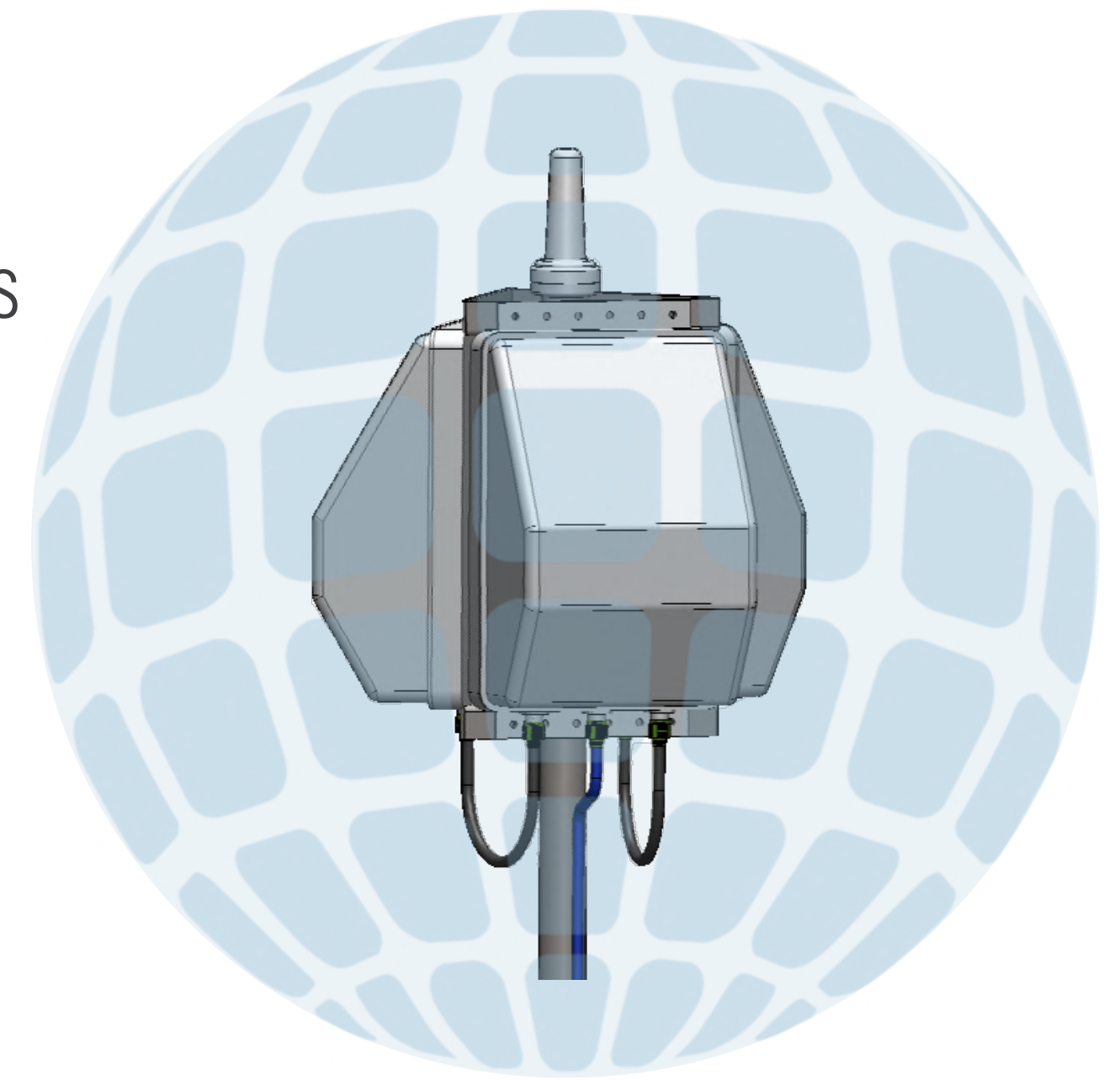
# SPHERICAL VIEW RADAR

## FOR UAV DETECTION AND TRACKING

**Breakthrough spherical coverage Radar technology rendering prior generations of UAS detection systems obsolete. Currently in development, available late 2021**

## PERFORMANCE

- Simultaneous spherical coverage (360° azimuth, 360° elevation) with a minimum range of 2 km per sensor, scalable to cover facilities of any size with no blind zones
- Detection and tracking of airborne targets with radar cross section of 0.001 square meters (~3x3 cm)
- Detection and tracking with accuracy of 1 m<sup>3</sup>, regardless of range, at day or night, and in all weather conditions
- Target velocity from 0 km/h up to 500 km/h
- Simultaneous detection and tracking of up to 100 targets with 0.5 m separation between targets
- Detection and tracking of low-flying targets 1.0 m above the ground and targets in close proximity to sensor



## FEATURES

- Sensor configuration is scalable to provide coverage to facilities of any size and geometry, and be tailored to avoid any shadow zones in complex and cluttered environments
- Detects any type of drone, including small, autonomous (i.e., no RF emissions), silent and hovering
- Provides security against insider threats, detects drones launched from within the controlled sphere of operations
- No licensing required for installation and operation, can be safely used in congested RF environments
- Intuitive web based Graphical User Interface showing exact drone location on 2D and 3D display
- Target data is exported via industry-standard protocols for integration with other security and counter drone systems

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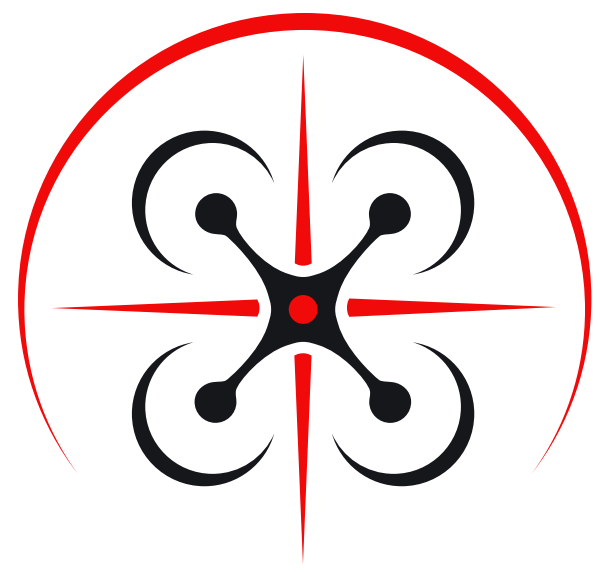
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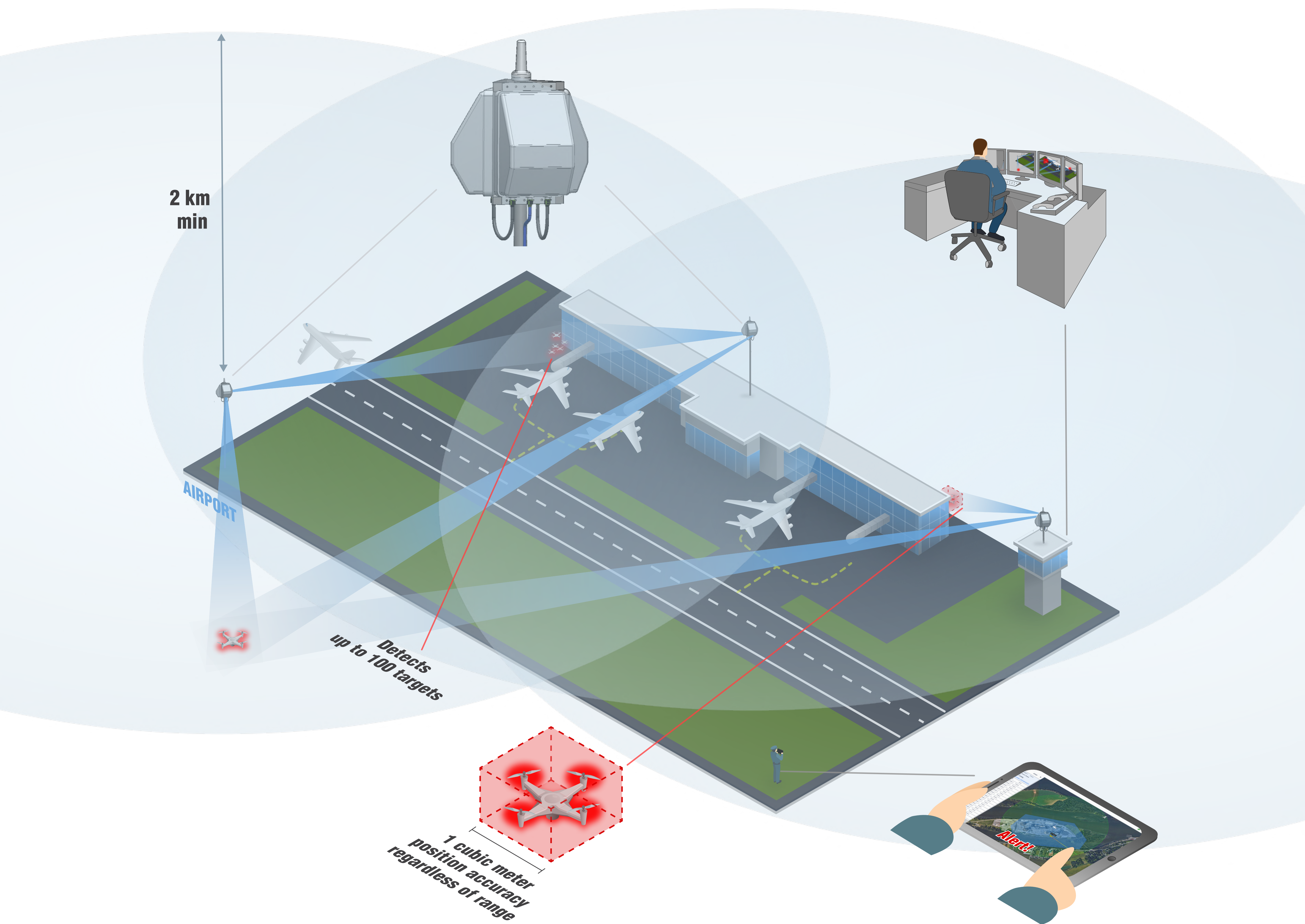




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Critical infrastructure, Military installations, Public events, Privacy sensitive facilities and property, etc. The system detects and tracks man-made airborne targets, including UAVs in the operational area, providing situational awareness, target tracking, and integration to other elements of a larger security systems enabling an appropriate response.

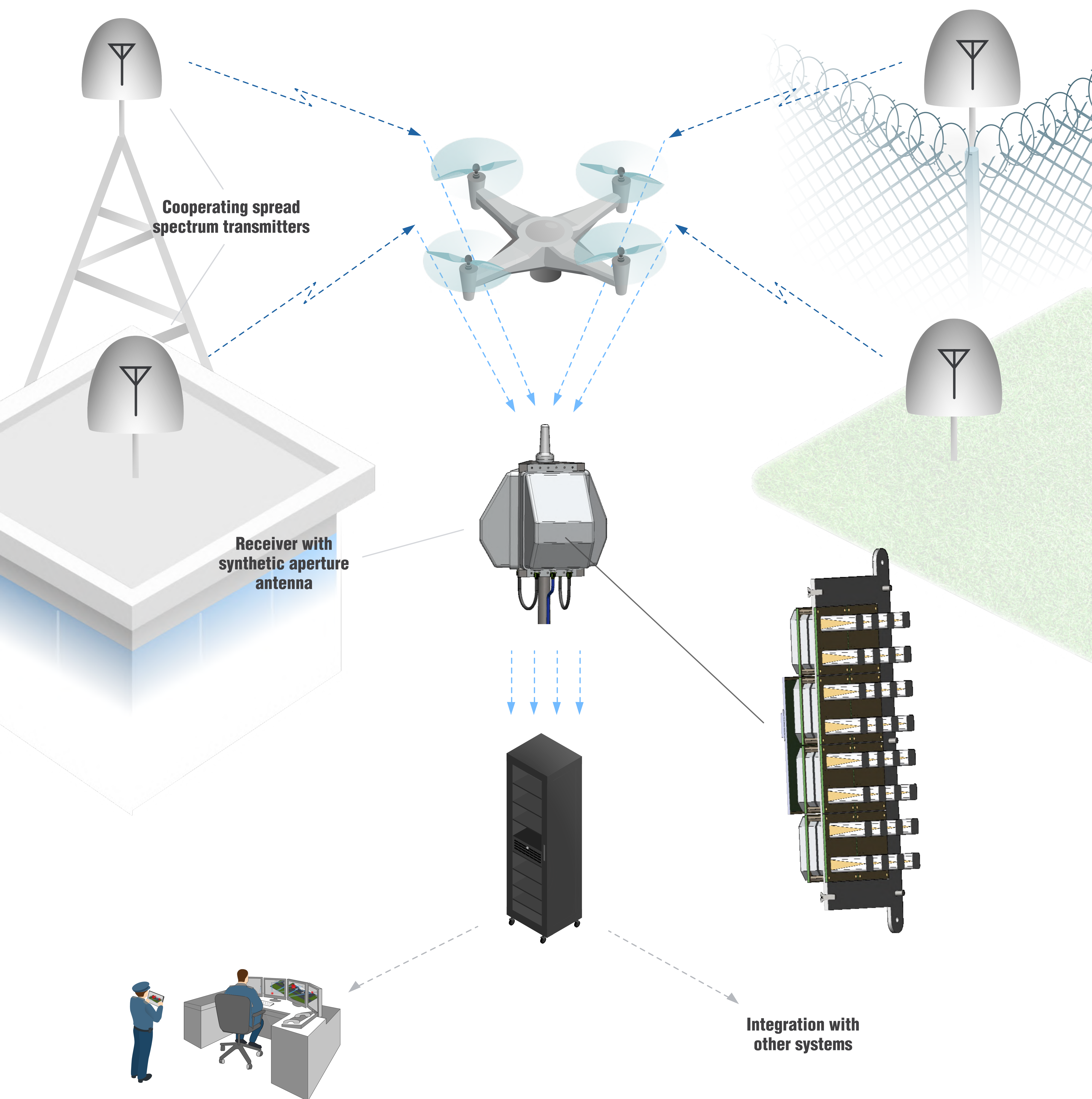


SPHERICAL VIEW RADAR

[www.sphericalradar.com](http://www.sphericalradar.com)



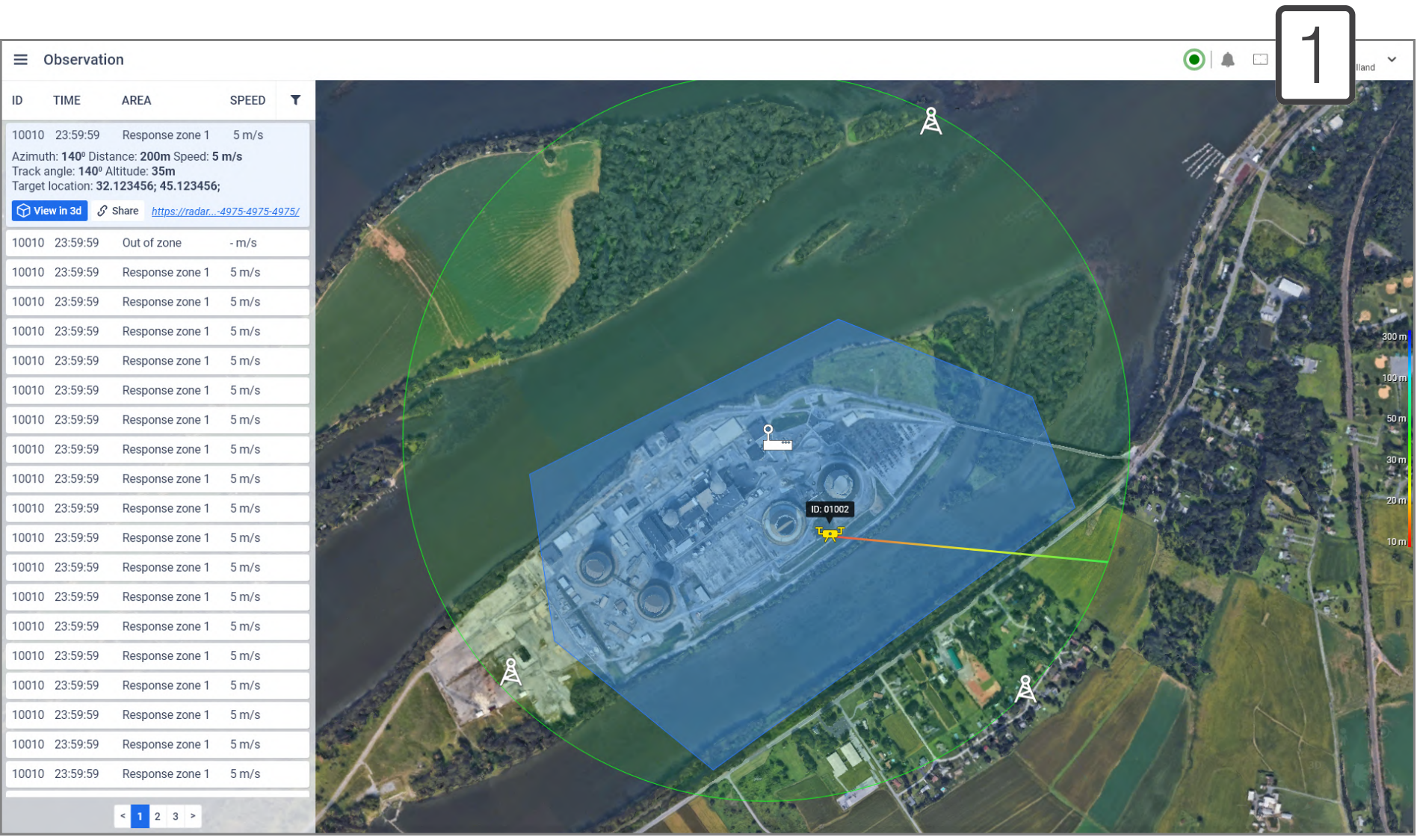
# PRINCIPLE OF OPERATION BI-STATIC SPHERICAL RADAR



\* Minimum system configuration: 1 receiver, 4 transmitters

Additional networked receivers and transmitters can be added to expand coverage area and eliminate blind spots





# USER INTERFACE

- 1 Observation screen with 2d map and realtime data, geofencing
- 2 Drone tracking screen with 3d map and history data
- 3. Radar sensors connection and configuration
- 4. Radar target data logs
- 5. Map configuration
- 6. User administration
- 7. Authorization

# DRONE DETECTION TECHNOLOGIES COMPARISON

Criteria \ System	Radio Frequency Monitoring	Acoustic	Optical	CW and MonoStatic RADAR	Spherical View Radar
Range of detection	Good	Poor	Medium	Exceptional	Good
Probability of detection	Poor	Poor	Good <sup>1</sup>	Good	Exceptional
Accuracy of detection	Poor	Poor	Exceptional <sup>1</sup>	Medium	Exceptional
Detection of autonomous drones	No	Yes <sup>1</sup>	Yes <sup>1</sup>	Yes	Yes
Simultaneous detection of multiple drones	Yes	Yes	No	Yes	Yes
Detection in urban environment	Poor	Poor	Poor	No	Exceptional
360° spherical coverage, no blind zones	Yes <sup>2</sup>	Yes <sup>2</sup>	No	No	Exceptional
Licensing required	No	No	No	Yes	No

\* 1. if in ideal environmental conditions

\* 2. If no external interference

