

RRS-IRIS / A1

IRIS® Drone Detection Radar

FULL 360 DOME-LIKE COVERAGE

IRIS® combines smart software with affordable radar, and is built explicitly for drone detection and tracking.

With 360° azimuth coverage, and a huge elevation coverage of 60°, IRIS® provides you with early warning of approaching drones, in all directions, giving you precious time to react.

And the high elevation coverage means you don't have to worry about drones coming in over the top of your radar.

POSITION TRACKING IN 3D

Height information is particularly important for cueing cameras and other sensors and weapon systems.

That's why IRIS® is a 3D radar, providing accurate height information for quick and smooth detection and mitigation of rogue drones.

When the stakes are high, every second counts. You need pinpoint accurate and direct tracking for quick interventions.



SMALLER, LIGHTER, MORE POWERFUL

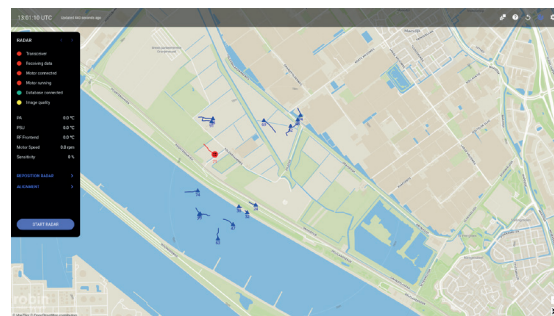
Size does matter. Today's drone threat calls for small and lightweight drone radars AND excellent detection range and coverage. Most radars do one or the other. With IRIS®, we refused to make that compromise.

A small and lightweight form factor, with best in class detection range and full coverage; you can take IRIS® with you, and easily deploy and redeploy as you need.

MICRO-DOPPLER CLASSIFICATION

IRIS's micro-Doppler capability provides the necessary confirmation that a target has rotor blades.

It's also what allows IRIS® to detect hovering drones, and to distinguish drones from other moving objects, like birds, avoiding false alarms.



“IRIS® can detect and classify drones swiftly and smoothly. It's very easy to use. Moving targets, static targets, even multiple targets; they're all detected and classified.”

Marijn Verbaant - Min-Def C-UAS

MULTIPLE TARGETS AND DRONE SWARMS

Drones can be pre-programmed for autonomous flight with no operator and can approach in swarms. Any drone detection system needs to be capable of detecting multiple targets simultaneously. IRIS® can detect and track hundreds of drones at the same time. ELVIRA® as standard. Other protocols, like ASTERIX, are available on request.

WHAT'S INCLUDED

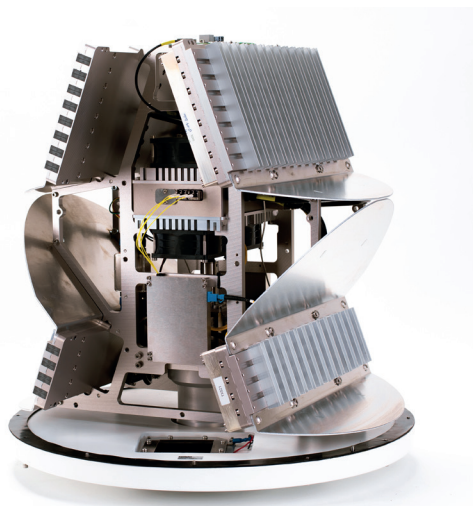
IRIS® comes as a complete 3D radar system including back to back radar antennas, processing station and user interface, breakout box and interconnecting power and network cables. The processing station and user interface is available as a laptop, rugged laptop, or 19" rack server.

- Radar Antenna
- Processing Station / User Interface
- Breakout Box
- Cables (Interconnector, power, network)
- User Manual
- Certificates

IRIS® comes with an easy to use quick-mount tripod. It can also be deployed on a mast.

SPECIFICATIONS

Technology	FMCW
Frequency	X-Band (8900-9650 MHz)
Power Output (continuous)	2 x 12W
Instrumented Range	5 km
Detection Range (DJI Inspire)	4 km
Classification Range (DJI Inspire)	1.4 km
Main Beam Width	6° x 60°
Azimuth Coverage	360°
Elevation Coverage	60° (-10° to 60°, adjustable)
Azimuth Accuracy	0.6°
3D Elevation Accuracy	1°
Range Accuracy	0.6m
Track While Scan	Yes
Rotation / Scan Speed	30rpm / Update Rate 1s
Classification Method	Micro-Doppler
Dimensions (Diameter x Height)	554mm x 623mm
Weight	25kg (excl. tripod, connector, and laptop)
Power	100-240VAC, 50-60Hz
Communication	Ethernet, 1000Base-T
IP Rating	IP66
Operational Temperature	-19°C to +49°C



EASY TO INTEGRATE AND DEPLOY

Small and lightweight; IRIS® is very easy to deploy. And you can integrate IRIS's tracks and alarms as a layer in your own existing security systems and Command and Control (C2) systems.

A simple XML broadcast-based interface is included with IRIS® as standard. Other protocols, like ASTERIX, are available on request.

NONE OF US IS AS SMART AS ALL OF US

We believe in the power of cooperation between companies, based on the integration of modular systems.

IRIS® is designed to be the preferred primary radar within a 'system of systems'.

Our drone detection radar is ready for integration with other detection systems, existing command centres and new forms of intervention.

