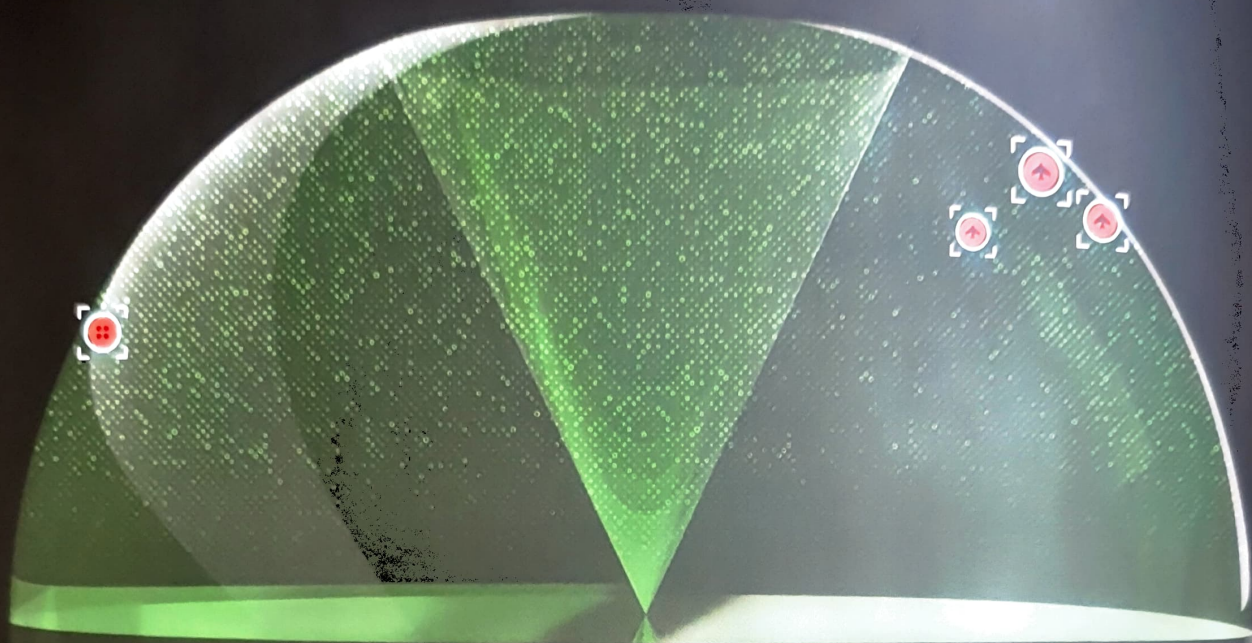PRODUCT SHEET

IRIS 3D
360° UAS
DETECTION

robin
radar systems

DISCOVER OUR SMALL BUT MIGHTY 3D DRONE RADAR

IRIS combines leading classification accuracy, versatility and coverage in a deployable 29 kg (64 lb) package.

360° COVERAGE IN 3D

The drone threat can develop in any direction, we built IRIS for unrivalled awareness and precious time to react. Uniquely, this radar combines 360° azimuth views, with 60° elevation for real-time 3D technology and complete awareness all year round. Day or night.

CLASSIFY WITH CONVICTION

Detection is your first line of defence. IRIS classifies every type of drone in seconds, even fixed-wing and hovering drones. Cutting-edge micro-doppler and deep neural networks (DNN) mean world-class accuracy and low false alarm rates.

BUILT TO INTEGRATE

Infinitely deployable and simple to integrate, IRIS is lightweight at just 29 kg. With an interoperable interface, IRIS slots seamlessly into your tech stack to cue other sensors with precision.

MISSION-PROVEN WORLDWIDE

We're proud to collaborate closely with 25+ experienced partners and integrators. IRIS is mission-proven all over the globe, supporting military and police forces, political summits, airports, prisons, large-scale events, oil rigs and powerplants to tackle the drone threat.
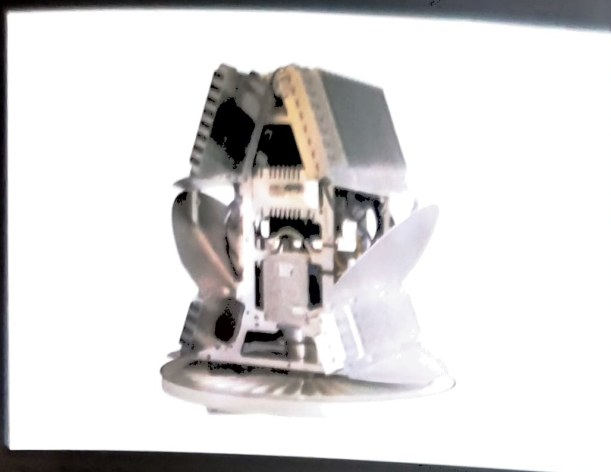
Back-to-back sensors allow for 1 second update rate and micro-doppler classification

DEPLOY IN UNDER 15 MINUTES

Because every moment counts, deploying IRIS takes less than 15 minutes. Deploy and redeploy on buildings, tripods, and even vehicles.

DETECT AT 100KM/H

IRIS detects, tracks and classifies at speeds of up to 100 km/h (60 mph) with our On-The-Move (OTM) add-on.

78KM² COVERAGE AREA

IRIS is a small drone radar that covers a big area. By combining 360° azimuth, 60° elevation, and a 5 km (3.1 mi) instrumented range, IRIS gives you a 78 km2 (30.1 sqm) coverage area in. Extend it further by pairing multiple IRIS radar systems.

CUSTOMISE YOUR IRIS

- **Quick-mount tripod or vehicle mount**
- **Choose from four colours** ● ● ● ●
  - White
  - Sand Beige
  - Bronze Green
  - Brun terre de France
- **On-The-Move (OTM) hardware upgrade**

IRIS SPECIFICATIONS

Technology	FMCW
Frequency	X-Band, 8900 MHz (8775-9100)
	9250 MHz (8975-9300)
	9650 MHz (9500-9800)
Power Output (continuous)	2 x 12 W
Instrumented Range	5 km (3.1 mi)
Main Beam Width	6°
Rotation / Scan Speed	30 rpm / 1 s
Elevation Coverage	60°
3D Elevation Accuracy	1°
Range Accuracy	0.6 m (2 ft)
Angular Accuracy	0.6 - 0.75°
Track While Scan	Yes
Classification Method	Micro-Doppler
Upmast Dimensions (Dia. x Height)	550 mm x 630 mm (22 x 25 inch)
Upmast Weight (excl. foot)	29 kg (64 lb)
Power rating	200 W (nominal) / 336 W (max.)
Multi-radar	Up to four networked IRIS sensors
IP Rating	IP66
Ambient Temperature	-46° C to +50° C (-51° F to 122° F)
Environmental Testing	MIL-STD-810H Certified, NPSA Rated, STANAG 4370
Data Interfaces Available Include:	Asterix, Sapient and proprietary XML-API

IRIS OTM SPECIFICATIONS

Max. Vehicle (Radar) Speed	100 km/h (62 mph)
Max. Vehicle Tilt	10°

DETECTION & CLASSIFICATION RANGES

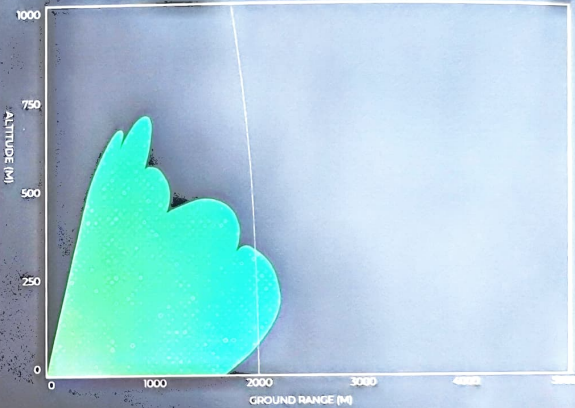| Drone	Detect. Range†	Class. Range††
Small Target (1.4 kg)	3.4 km (2.1 mi)	1.3 km (0.8 mi)
Medium Target (3 kg)	4.0 km (2.5 mi)	2.0 km (1.2 mi)

DETECTION COVERAGE DIAGRAM

For medium target (3kg)

CLASSIFICATION COVERAGE DIAGRAM

For medium target (3kg)

DRONE VIEWER SOFTWARE

† These ranges are indicative of the observed ranges achievable under good sight conditions.

†† These ranges are typically achieved under varying circumstances including moderate clutter.

††† IRIS requires a processing station and cable to operate. Items sold separately.

TALK TO OUR EXPERTS

Tel: +31 8 8700 8700 | E-mail: info@robinradar.com | robinradar.com

RRS.IRIS.A2.2024.V2