

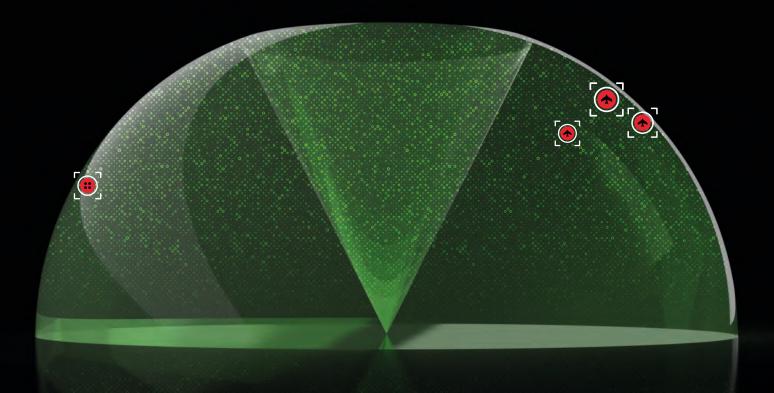


robin radar systems

**PRODUCT SHEET** 

# IRIS 3D 360° UAS DETECTION

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.

#### **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.

#### **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.

#### 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.

#### 78KM<sup>2</sup> 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	s)2x12 W	
Instrumented Range	5 km (3.1 mi)	
Main Beam Width	6°	
Rotation / Scan Speed	30 rpm/1s	
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 Met od	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	Jp 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

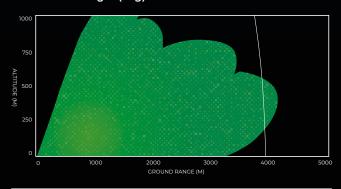
Max. Vehicle	(Radar) Speed	100 km/h (62 mph)
Max. Vehicle	Tilt	10°

## DETECTION & CLASSIFICATION RANGES

Drone	Detect. Range*	Class. Range**
Small Target (1,4 kg)	3.4 km (2.1 mi)	1.3 km <i>(0.8 mi)</i>
Medium Target (3 kg)	4.0 km (2.5 mi)	2.0 km (1.2 mi)

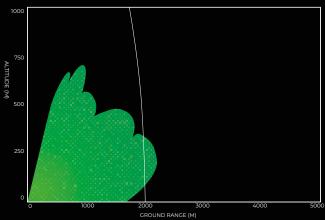
#### **DETECTION COVERAGE DIAGRAM**

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**



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