

UAS threats are becoming more prevalent, more capable and more lethal. Roke's *RapidEO* solution actually shows you what the UAS threat looks like in real time. Our dynamic, portable and deployable multi-UAS tracking capability is drone swarm native, designed with multiple, concurrent drone threats in mind. Allowing it to operate where image-based threat and risk verification matters most. Not only does the system rapidly notify you that when a drone threat is out there, but it presents high quality real time imagery to the user too. Our unique low burden and autonomous approach leaves you to get on with the day job.

All-in-one-solution

Roke's Al-powered *Rapid*EO sensor system is a dynamic all-in-one solution for detecting and confirming UAS threats. Portable, lightweight and requiring only a minimal power supply, *Rapid*EO can be deployed at scale to protect vehicles, buildings and people.

Its unique sensing agility allows it to protect against swarms and multi-axis attacks even in cluttered environments, raising the alarm and allowing decision-makers to respond quickly.

SAPIENT & BSI Flex 335 compliant. Compatible with Roke's OMNISCIENT C2 for Agile C-UAS.



Roke Agile Counter UAS - RapidEO

System Features

- Fully integrated standalone RADAR-EO C-UAS solution
 - Detect, Track and Identify (DTI) and target acquisition solution for C-UAS
 - World's best multi-UAS imaging capability ("drone swarm native")
- Ultra-high speed visual threat recognition
 - Up to 10 targets can be tracked simultaneously
 - x10 revolutions per second pan-tilt EO sensor capability
 - Over 50 times faster (50x) than standard pan-tilt units

- Al powered automatic threat detection
 - "Get ahead of the threat"
 - NOT dependent on threat libraries
 - Threat models built on Al/ML to identify never been seen before threats
- · Simple and effective user interface
 - Radar plot with tracks alongside updated imagery of verified threats
 - UI provides target location visual ID to user in real time
- Mast or building mountable or vehicle / hidden in a hire van for more covert operation
- SAPIENT/BSI Flex 335 compliant and designed for GVA integration

System Specifications

	Description	
Sensing Specification	Target Classes: EASA class C0/C1/C2/C3/C4 and NATO Class 1b or higher Target Types: Multi-rotor, fixed wing and hybrid Detection Range: Up to 2km Field of Regard: 120° Azimuth × 70° Elevation Optionally expandable to 360° coverage (Azimuth) Simultaneous Targets (Detection): >20 Simultaneous Targets (Verification and imaging): Up to 10	
Physical & Environmental Specifications	Peli Case 1 - Ancillieries (stakes, guide ropes, hammer, pump)	22kg 650mm × 250mm × 250mm (I × w × h)
	Peli Case 2 - Legs	19.5kg 1100mm × 300mm × 250mm
	Peli Case 3 - Mast	51.5kg 1305mm × 350mm × 350mm
	Processing Unit	40kg 800mm × 600mm × 420mm
	Base Unit	46kg 1030mm × 630mm × 500mm
	Sensor Head	31kg (including Radar) 920mm x 470mm (at widest point where Radar protrudes)
	Wiring Harness	4kg
	Weight	2 person lift
	Ingress Protection	IP54
	Operating Temperature	-20°C to +30°C
Interfaces	Mechanical Mounting: Mounts to Supplied Mast or Custom Bracket On Request Power Supply: 240V AC 50-60Hz tested and 110V AC Consumption: 400W normal operation and up to 900W at peak Data Output: ethernet, RJ4	
Radar	Frequency: Configurable on request (includes Ku-band) RF output: Fortem 8W (peak), Echoshield 180W (peak)	

For more information on our Roke Agile Counter UAS capability, RapidEO, please contact: info@roke.co.uk