

ELVIRA® and IRIS combine smart software, with affordable radar, and is built explicitly for drone detection and tracking. They provide you with early warning of approaching drones, in all directions, giving you precious time to react.



Dutch Radar Technology Company Robin Radar Systems has in November 2020 launched IRIS®, the only radar in the world to combine all important performance capabilities into a single package.

Drones can be pre-programmed for autonomous flight with no operator and can approach in swarms. Any drone detection system should, therefore, be capable of detecting multiple targets simultaneously. ***And they should not rely on the drone and controller radio signals, which are only present when the drone is actively controlled.***

Last but not least, any drone detector needs to distinguish drones from other moving objects, like birds, to avoid false alarms. The main problem is: for a radar to classify a drone – distinguish it from a bird or another object – it needs to spend ‘time on target’. However, to then track this object’s path, the radar needs to have a fast ‘update rate’, to rotate and update quickly. The result? An inevitable compromise between the ability to detect the drone and then track and follow its movements. IRIS® uses micro-doppler classification technology to identify drones by their propellers, and its patented design includes antennas back to back rotating antennas. The result: every target in airspace is seen twice on each rotation. That marries time on target with an ample update rate of every second for the tracking.

Users typically require a visual picture of the target to take further action. ELVIRA® can be equipped with a high-resolution pan-tilt-zoom (PTZ) camera for visual confirmation of the target. When a drone is detected, the camera zooms into its direction for a controller to acquire an image and report details.

Detection Range Micro-UAV.      2.7 km Elvira, IRIS 4km  
Classification Range Micro-UAV.    1.1 km Elvira, IRIS 1.4 km

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.

Links:

<https://www.robinradar.com/products>

<https://www.robinradar.com/press/downloads>

<https://www.dronewatch.eu/robin-radar-launches-iris-as-first-no-compromise-drone-radar/>

<https://youtu.be/NGTobj85gto>