



C-UAS
Counter Unmanned
Aerial Systems







## COUNTER UNMANNED AERIAL SYSTEMS (C-UAS)

The threat from UAVs has increased exponentially throughout the world, whether on land or at sea, in military or civilian scenarios. Chess' C-UAS solutions will assist the enforcement of exclusion zones to protect critical assets from unwanted surveillance, and attacks from hostile UAVs.

The Counter Unmanned Aerial Systems (C-UAS) from Chess Dynamics are designed to uncover and neutralise Unmanned Aerial Vehicles (UAVs) engaged in hostile airborne surveillance and malicious activity. It uses a combination of electronic-scanning radars, target detection, electro-optical sensors, and directional RF inhibition to provide 360° coverage and situational awareness. The system is a smart-sensor and effector package which is equipped with advanced AI capabilities for target classification and identification.

The systems from Chess maximise multiple sensors and fully integrate them into a Combat Management System (CMS). The CMS incorporates automatic alerts, identification and tracking that keeps the human in the loop. This allows a reduced manning profile, thus saving cost and time. The CMS is also sensor agnostic, which allows Chess to build a bespoke system best suited to the user environment. All sensors are overlaid onto a unified map for situational awareness.

The Chess C-UAS solutions can be installed and operated from fixed locations and from mobile platforms, which offers both flexibility and extended protection ranges. The C-UAS system provides an essential component of full spectrum air defence. They can be used in remote or urban areas, preventing the use of UAVs for terrorist attacks, espionage, or other malicious activities against sites of critical infrastructure.





## Key Features

- Tailored Smart-sensor and effector package capable of remotely detecting small UAVs
- On vehicle role change options
- Edge processing sensor fusion
- 4D radar, acoustic detection and R/F/D/F
- Disruption/inhibition delivers operational effect
- Software defined intelligent RF inhibition
- Long range colour camera and a high sensitivity Thermal Imager (TI)
- Automatic target classification
- High definition sensors
- Digital architecture
- Robust rugged design
- Sensor fusion
- Al driven, human controlled operation





## Chess Sensor Fusion

Chess utilise a layered approach to optimise system performance. No one layer provides the ultimate solution, but system sensor fusions ensure complete performance.

	Detection Range	Angular Accuracy	Range/Velocity Accuracy	Tracking	Autonomous (No RF-Link)	Weather/ Environmental	Classification	Hovering Drone	Robustness against defeat	Passive Detection
EO/IR Camera	()	()	()	()	()	()	()	()	()	()
RF Direction Finding	()	()	()	()	()	()	()	()	()	()
Acoustics	()		()		()					
RF Radio ID	()	()	()	()	()	()	()	()	()	()
Radar	()	()	()	()	()	()	()	()	()	()
RF Packet Sniff & Spoofing	()		()	()	()	()	()	()	()	()
Multi-Sensor	()	()	()	()	()	()	()	()	()	()







Chess Dynamics Limited
Quadrant House

Quadrant House North Heath Business Park, North Heath Lane Horsham, West Sussex, RH12 5QE United Kingdom

sales@chess-dynamics.com

www.chess-dynamics.com

**Tel:** +44 (0)1403 249 888

**Fax:** +44 (0)1403 249 555