

# FALCON SHIELD

## COUNTER AIR SYSTEM (C-UAS)



Falcon Shield is a rapidly deployable, scalable and modular system designed to address the threat from low, slow and small air systems (UAS).

Falcon Shield's flexible configurable system enables highly accurate detection, tracking, identification, geo-location and mitigation of UAS threats through a complimentary, fully integrated suite of sensors and effectors.

Falcon Shield's software Command, Control and Situational Awareness (C2SA) environment provides a modular integration framework and intuitive user interface enabling comprehensive monitoring of the UAS threat environment and delivery of effective threat mitigation. Customer specified and third party equipment can be readily integrated into the system.

The framework enables the Falcon Shield system to be tailored and optimised to meet the demands of varied locations, threats and end-user concepts of operation.

Utilising specialised radar and Electronic Surveillance Measures (ESM) covering 360°, UAS threats are rapidly detected, tracked and prioritised. Falcon Shield exploits the company's range of high-performance Electro Optical (EO) sensors and advanced Radio Frequency (RF) effector technology enabling threats to be confirmed and neutralised at range and providing a shield around the area being secured.

### APPLICATIONS

- Security and protection of military forces and bases
- Protection of critical infrastructure and facilities
- Safety at public, national and government events
- Fixed, relocatable or deployable configurations
- Sector, zonal or wide area security and surveillance

## OPTIONS

- Fixed installation with a central C2SA station with distributed fixed or relocatable sensor and effectors
- Flexible, deployable systems with C2SA dismountable form or integrated into Mobile Surveillance Vehicle (MSV) with ground or trailer based mast systems for extended range sensor and effector capability
- Deployable systems with man portable C2SA with round or mast mounted sensors for agile and rapid deployment
- Combination of electro-optics, electronic surveillance and radar sensors to enable an optimised solution for specific installations or deployments
- Advanced electronic attack capability to deny, disrupt or defeat UAS command, control, navigation and UAS data downlinks
- Open architecture enables through-life capability enhancement and supportability
- Training and support packages

## KEY FEATURES AND USER BENEFITS

### Command, Control And Situational Awareness (C2SA)

<b>Intuitive Human Machine Interface (HMI)</b>	Ease of use, low user fatigue and training needs
<b>Automated threat detection and tracking</b>	Minimises operator workload
	Maximises situational awareness with low false alarm rates
<b>Open-standards IP based control interfaces</b>	Easy interface with existing customer infrastructure
<b>Geospatial Information Systems</b>	Enables accurate geo-location of threat for hand-off to effector, counter-measure or external actor

### Radar

<b>Open-standards IP and ASTERIX radar interfaces</b>	Enables radar selection appropriate to deployment
<b>Continuous 360° or sector coverage</b>	Enable panoramic or sectors surveillance and alerting
<b>Federated or integrated radar solutions</b>	Enables integration with existing air defence radar installations or as a stand-alone system

### High Performance Electro Optical (EO) System

<b>NERIO-ULR Gyro-stabilised EO payload with 360° coverage</b>	Operation on ground or mast/tower mounted to minimise blind arcs and inter-visibility constraints
<b>Family of EO payloads</b>	Solution for both close-in, e.g. urban canyons and long-range surveillance and threat identification
<b>High-resolution thermal and visible band cameras</b>	Enables threat evaluation and confirmation at beyond effective threat range
<b>Eyesafe laser range finder</b>	Aids accurate geolocation of UAV controller location when identified via EO sensors

### RF Management

<b>Electronic surveillance and attack</b>	Electronic Surveillance to provide detection and tracking of threat elements
	Integration of a low collateral Electronic Attack capability to provide a multi-layered threat response through command link control intervention

### Flexible Deployment Solutions

<b>Modular and scalable system architecture</b>	Configurable as a fixed, relocatable or deployable system
<b>Multiple EO and RF sensors capability</b>	Ability to optimise sensor locations and coverage
<b>Rugged design</b>	Enables deployment in a broad range of operational requirements across a global environment

For more information:  
infomarketing@leonardo.com

Leonardo Electronics  
Sigma House-Christopher Martin Road-Basildon-Essex SS14 3EL -United Kingdom  
T +44 (0) 1268 522822

This publication is issued to provide outline information only and is supplied without liability for errors or omissions.  
No part of it may be reproduced or used unless authorised in writing.  
We reserve the right to modify or revise all or part of this document without notice.

2022 © Leonardo UK Ltd

MM08605 12-22