DRONEDEFENCE

SMART SECURED AIRSPACE

PRODUCT BROCHURE

VOL 6.1 - 2025

DRONEDEFENCE.CO.UK

“AT DRONE DEFENCE WE USE OUR PROPITIATORY TECHNOLOGIES TO DELIVER A SMART, SECURE AND ASSURED AIRSPACE.”

SECTIONS

01 - **ABOUT US.**

TAILORED DRONE SECURITY SOLUTIONS

The future of aviation is sustainable, small and automated.
Drones will change the way we monitor, manage and move around or fragile planet.

But first we need to fix the drone safety and security problem.

Drone Defence have developed a broad portfolio of critical enabling technologies for the drone industry.

Drone Defence produce equipment, integrated systems and assured data services, to deliver a common airspace surveillance picture, along with mitigation equipment for authorised users.

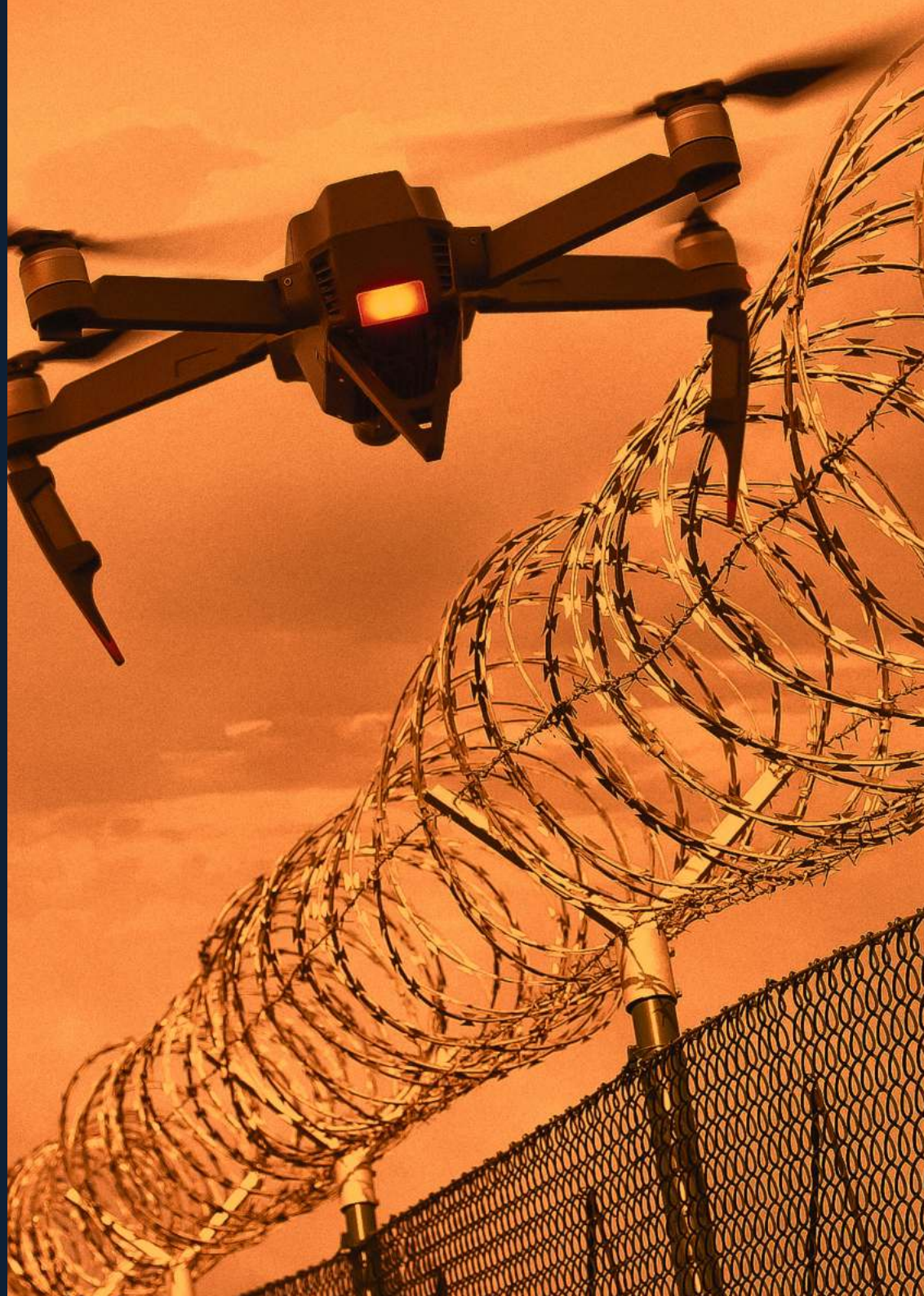
02 - **SITUATIONS WE PROTECT.**

WHAT & WHERE

Our products and solutions provide protection from drones in a range of situations and locations including:

- Prisons
- Stadiums & event venues
- Critical infrastructure
- Super-yachts
- VIPs and high net worth individuals
- Airports
- Corporate buildings
- Borders
- Private Estates

03 - **THREAT LEVELS.**



THREAT LEVEL MATRIX.

The first and most important question you should consider is: **'WHAT DRONE RELATED THREAT DO I NEED TO PROTECT MYSELF AGAINST?'**

We have produced the following matrix for you to consider your 'threat level'.

	Threat Level 1	Threat Level 2	Threat Level 3
Who?	Benign - Lone nuisance drone user including paparazzi	Criminal - Lone activist, terrorist or drone operator with limited criminal intent	Terrorist - Medium to high technical ability. Supported terrorist groups, advanced criminal networks and state actors/intelligence services
What (Intent)?	Deliberate invasion of privacy	Disruption, hostile surveillance, transport of illicit substances and commercial espionage	Severe economic impact, a 'spectacular' event and multiple casualties
Technical ability	Low – no modifications to drone	Medium – minor modifications to drone	High – custom built drones
Evasion Ability	No awareness of drone defence technology, no defensive measures or actions taken	Some awareness of drone defence technology, obscured launch points used	Extensive awareness, obscured launch points at greater distances, RF precautions and high use of autonomous flights
Type of Drone	Commercial multi-rotor only	Commercial multi-rotor and fixed wing	Multi-rotor & Fixed Wing
Number of Drones	Single	Single	More than two
Control Method Used	Real-time command and control	Real-time command and control	Fully autonomous
Frequencies Used	2.4 & 5.8 GHz	2.4 & 5.8 GHz	Any
Launch distance from Target	Up to 1km	Up to 5km	Over 25km
Altitudes flown	100 to 400ft	50 to 1000ft	20 to 5000ft
Flying Conditions	Day in fair weather only	Day and night in fair weather	Day and night in all weathers
GPS Guided	Yes	Yes	No
Likelihood	Very High	High	Very low
Impact	Varied – depending on imagery captured	High – based on activity and intent	Extreme – based on advanced capability, activity and intent
NATO Class	MICRO	MICRO CAT 1	CAT 1 & 2
Payload	Up to 2km	Up to 20kg	Up to 150kg

THREAT LEVEL SOLUTIONS.

Once you have defined your 'Threat Level' you will need the equipment in the matrix below to provide protection.

The three main factors in considering project budget are:

 Threat level required

 Size of area

 Mitigation requirement

	DETECTION				MITIGATION						
	Mobile Solutions	Fixed Solutions			Mobile Solutions				Fixed Solutions		
	AeroSentry Patrol	**AeroSentry One V2**	**AeroEye**	**AeroSense**	**E2000** (C2 jamming only)	**E1000** (C2 jamming only)	**E2000** (C2 + GPS jamming)	**E1000** (C2 + GPS jamming)	**AeroDome** Six-sector / Omni directional	**SkyFence** (Optional)	**AeroBeam** (Optional)
Threat Level 1	•	•			•	•					
Threat Level 2	•	•	•	•			•	•	•		
Threat Level 3	•	•	•	•			•	•	•	•	•

04 - **OUR PRODUCT SOLUTIONS.**

CONTENTS

AEROTRACKER.

INTEGRATED AIRSPACE MONITORING

Using the AeroTracker interface, airspace managers and drone users can view drone flights alongside manned aircraft in real time.

- Available as a web progressive app
- Provides reassurance, real-time information and flight logs
- Track drones alongside other forms of aviation
- Real-time alerts and notifications
- Set customised geographical warning zones
- Alerts sent to any device including smart phones and smart watches
- Provides automatic flight log recording for pilots

TRY AEROTRACKER
www.aerotracker.io

AEROSENTRY ZERO.

DRONE DETECTION & TRACKING

AeroSentry Zero is a remote-ID receiver, designed to monitor compliant aircraft and drones.

The sensor receives data via ADS-B feed, as well as remote ID, with the sensor being compliant with ASTM F3411-22 standards.

AeroSentry Zero provides 3D positioning and classification of drones and their controllers, at a distance of up to 5km.

The sensor provides regular location updates, with data being received every 1-5 seconds.

AeroSentry conveniently supports Power over Ethernet.

SPOOF RESISTANT

The AeroSentry Zero system accurately verifies the authenticity of a drone, ensuring that any 'spoof' drone data is classified as such.

TECHNICAL SPECIFICATIONS

Power	PoE
Form Factor	240 x 130 x 130 mm
Temperature	Operating -45°C up to 85 °C
Conditions	All weather (IP65 enclosure)

HOW IT WORKS

1

Drone Detection

2

Real-Time Tracking

3

Aircraft Identification

DETECT

PORTABLE DRONE DETECTION

AEROSENTRY PATROL.

PORTABLE NETWORKED DRONE DETECTION

AeroSentry Patrol is a handheld, full-spectrum drone detection and tracking device designed for rapid deployment and seamless integration with the AeroTracker platform. It provides real-time intelligence on nearby drone activity, pilot location, and signal characteristics. Engineered for security-conscious users, the device features cyber-hardened firmware and ensures that all data is securely hosted on UK-based servers, with no external telemetry.

AEROTRACKER PLATFORM INTEGRATION

When connected to AeroTracker, AeroSentry Patrol becomes part of a wider detection ecosystem. Data from multiple handhelds can be correlated with radar, ADS-B, and optical feeds to deliver:

- Centralised map-based airspace view
- Configurable alert zones and escalation pathways
- Detection playback and audit logs
- Role-based user access and multi-site monitoring

KEY FEATURES

- Portable, single-operator handheld unit (650g)
- Real-time detection of DJI, FPV, DIY and other common drones
- Pilot/remote control geolocation and tracking
- Full integration with AeroTracker: map overlay, alert zoning, playback
- UK data hosting and GDPR-compliant cloud platform
- 4 units supported per AeroTracker account (standard license)

AEROSENTRY ONE V2.

DRONE DETECTION, TRACKING, CLASSIFICATION & JAMMING

We offer the ability to detect, track and identify drones across a wide area. Using multi-sensory technologies we can give you notice of a drone operating in your airspace.

AeroSentry uses advanced RF signal processing techniques to determine the bearing of the drone and approximate range. From a single location, the AeroSentry sensor can deliver a general direction of the incoming drone, so security officers know where the potential threat is coming from. This allows for a more comprehensive operational response.

HOW IT WORKS

1. AeroSentry detects a drone's RF signature up to 2km away
2. Information displayed in our AeroTracker platform
3. Security operatives alerted or the drone jamming system is automatically activated

AEROEYE.

OPTICAL DRONE DETECTION

AeroEye is a unique and class leading AI powered video analytics technology that accurately detects, tracks, and identifies drones at ranges of over one kilometre.

It uses high definition fixed focal-length area scan cameras to monitor and detect the presence of a drone. AeroEye's AI technology provides detection of multiple drones, tracked simultaneously.

It has a long range detection distance that detects, tracks and provides accurate classification. AeroEye can be fully integrated with other Drone Defence technologies such as AeroTracker and AeroSense.

CAMERA OPTIONS

Range	Up to 500m (day/low light)
Field of view	360°
Aircraft identification	Quadcopter UAV Fixed wing UAV General/commercial aircraft
Maintenance	Annual manual inspection

Range	Up to 1km (in ideal conditions)
Field of view	360°
Aircraft identification	Quadcopter UAV Fixed wing UAV General/commercial aircraft
Maintenance	Annual manual inspection

Range	Up to 1km (in day/low light)
Field of view	360°
Aircraft identification	Quadcopter UAV Fixed wing UAV General/commercial aircraft
Maintenance	Annual manual inspection

Range	Up to 20km (in ideal conditions)
Field of view	360°
Aircraft identification	Quadcopter UAV Fixed wing UAV General/commercial aircraft
Maintenance	Annual manual inspection

HOW IT WORKS

1. Highly sensitive cameras are clustered into IP67-certified units.
2. The AeroEye camera zooms in on the object and tracks its movements and trajectory.
3. AeroEye can track multiple drones at the same time, in a full 360 degree radius.
4. Images and the identity of the detected object can be recorded automatically for use as evidence for in prosecutions, if necessary.

AEROSENSE.

RADAR DRONE DETECTION

AeroSense is a highly functional radar designed specifically for UAS detection.

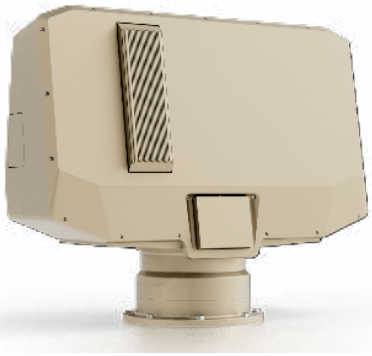
New detection threats and radar tracks are established in less than 1 second. Small drones are detected and tracked at up to 850m.

AeroSense is a highly compact and lightweight design, which is perfect for mobile and rapid deployments.

RANGE UP TO 1KM

RANGE UP TO 8KM

RANGE UP TO 20KM



TECHNICAL SPECIFICATIONS

Range	Up to 1km in ideal conditions
Field of view	360° Azimuth / 80° Elevation
Weather ratings	Suitable for all weathers
Operating Temperature	-40° to + 75° Celsius
Maintenance	Annual manual inspection

Range	Up to 8km in ideal conditions
Field of view	360° Azimuth / 45° Elevation
Weather ratings	Suitable for all weathers
Operating Temperature	-20° to + 60° Celsius
Maintenance	Annual manual inspection

Range	Up to 20km in ideal conditions
Field of view	360° Azimuth / 60° Elevation
Weather ratings	Suitable for all weathers
Operating Temperature	-32° to + 49° Celsius
Maintenance	Annual manual inspection

DETECT

MARINE

AEROSENTRY MARINE ONE.

PROTECTION FOR SUPERYACHTS

AeroSentry Marine One is a maritime version of our proven land-based drone defence technology. The system detects and mitigates the threat posed by unmanned aerial vehicles (UAVs).

When full integrated into the vessel's security system, AeroSentry Marine One can provide complete protection from 99% of commercial drones.

- The most advanced drone detection system available on the commercial market
- AeroSentry Marine One combines passive background scanning radio frequency technology, with real-time signal analysis, meaning the system can identify and track (range, altitude & bearing)
- Easily installed on any vessel
- Detects operator controlled common drones using 2.4 and 5.8 GHz (drones typically used by irresponsible drone user and paparazzi to invade privacy)
- Detects drones and their controllers up to 2km away

DEFEAT

PORTABLE

PALADYNE E1000MP.

PORTABLE DRONE JAMMING SOLUTION

Versatile, effective and robust, the Paladyne E1000MP has been designed to offer multiple scenario protection in one complete package, providing a safe, portable system for stopping all commercial drones.

No installation required, and with systems available for immediate delivery, the E1000MP can secure your airspace at sea, at home and on the move.

The E1000MP disrupts 2.4 and 5.8GHz command and video transmission frequencies (alternative optional frequencies are also available), along with GPS meaning the drone will automatically 'return home', whilst the operator is unable to

- Lightweight & efficient
- Cold start time - 0.5 seconds
- Robust & versatile
- Straight out of the box operation
- Rotary dial switch to enable and select jamming frequency ranges
- Other optional jamming frequencies are also available

DEFEAT

PORTABLE

PALADYNE E2000HH.

PORTABLE DRONE JAMMING SOLUTION

Safe and easy to use, the Paladyne E2000HH is a lightweight, self-contained portable drone jamming unit. When used by a trained operator, the E2000HH can force a commercial drone to return to home or land under control.

The operator can control the channels they wish to intercept meaning that they could even activate the 'return to home' function in the drone and then find out where the operator is. The Paladyne E2000HH is safe, easy to use and economical.

Disrupting the drone is the only way to ensure that you protect your airspace and not pose a risk to others.

- 40W combined power
- Battery standby time of 30 days
- Up to 2 hours of use
- Supplied in a durable carry
- 2km range
- 2.8kg unit

SKYFENCE.

FIXED INSTALLATION DRONE PROTECTION

SkyFence is an electronic countermeasures system which prevents drones from flying into or close to a protected location by disrupting its command and navigation radio transmissions; in any weather, day or night. It can be configured horizontally or vertically depending on the operational requirements.

As a system it uses multiple low-powered radio transmitters which are strategically placed around the protected site. When activated, they transmit a signal which is designed to overwhelm the drone's radio transmissions. This breaks the control and video link between the drone and its operator.

- Fully programmable
- Activated via automatic sensors or manual input
- Completely scalable
- Ability to integrate into an existing Security Management System
- No effect on internal or external communication systems

AERODOME.

DRONE MITIGATION SOLUTION

AeroDome is effective against all operator controlled drones using 2.4 and 5.8 GHz, typically used by irresponsible drone users and paparazzi, to invade privacy.

As an optional extra, GPS mitigation can be specified, which is effective against GPS programmed drones.

- Easy to install
- 6 Sector Directional Antenna (2.4 & 5.8 GHz)
  Omni-directional options are also available
- IP65 rated
- Manual or automated jamming activation
- Mitigate drones up to 1km (planning range 500m)

AEROPING.

REMOTE ID

There is an increased need for a real-time drone transponder and e-Identification to increase airspace safety, and enable a future where drones can share the skies with manned aircraft.

Recognising this need, aviation authorities around the World are bringing in mandatory requirements for drone remote identification, within the next few years.

Get remote-ID ready with AeroPing & AeroTracker

AeroPing connects with our cloud-based air traffic monitoring platform AeroTracker, which connects authorities and air traffic managers with drone pilots to safely integrate drones into airspace.

- FAA & EASA Approved
- Compliant with ASTM F3411-22
- Compliant with remote-ID legislation as outlined within Japan's Civil Aeronautics Act 2020
- High precision tracking accuracy using a GNSS module
- Secure pilot information with a range of 1000m (further can be achieved in ideal conditions)
- Lightweight device - 38g
- Bluetooth Low Energy (BLE)
- e-identification, 3D location and take-off position

ENABLE

SOLAR SENTINEL.

A COMPLETE & PORTABLE DRONE SOLUTION

The Solar Sentinel is a complete off-grid security solution for CCTV and Drone Detection, using our AeroSentry and AeroEye technologies. It is powered solely by renewable energy, and is completely zero emission.

It is the UK's only solar powered, rapidly deployable Drone Detection and CCTV platform.

Dispensing of the need for line installation or groundworks, Solar Sentinel combines the latest camera surveillance technology with our proprietary drone detection software, AeroSentry.

24 Only 24 hours deployment time required within the UK

45 Only 45 minutes set up time

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GET IN TOUCH

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