



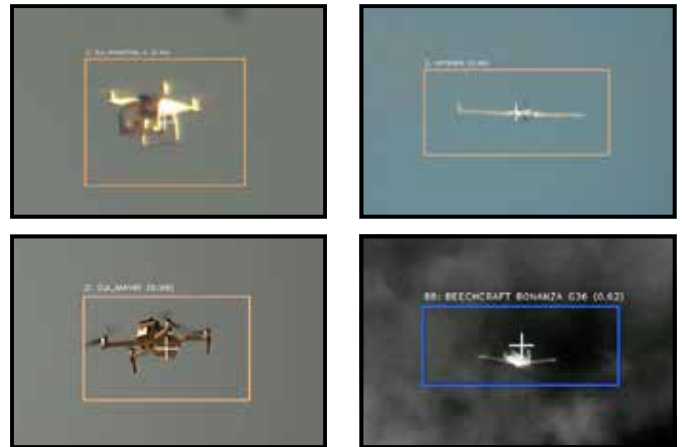
Aircraft Detection: Applying Artificial Intelligence to detect and identify Aircraft (fixed wing and rotary wing) to save lives and protect resources.

OVERVIEW

Artificial intelligence-based capability detects aircraft day or night, at a distance that allows effective security response. Integrates with an EOIR camera system via an artificially intelligent equipped computer. Automatically notifies resources to provide faster response time and take defensive and offensive action. Tracks the aircraft location in real time to provide a better defense.

TECHNICAL

Even dedicated and trained personnel using the best camera system can't provide 100% real-time observation. A proactive solution is needed to detect aircraft threats to allow an effective defense. Exigent-DR, an artificial intelligence-based UAS detection capability developed for the US Army, offers that solution.



Exigent-DR can easily distinguish aircraft from other objects, day or night, in any weather condition.

EXIGENT-DR PROVIDES A RELIABLE, INTEGRATED METHOD TO:

1. DETECT

Autonomously detect aircraft against any background, day or night.

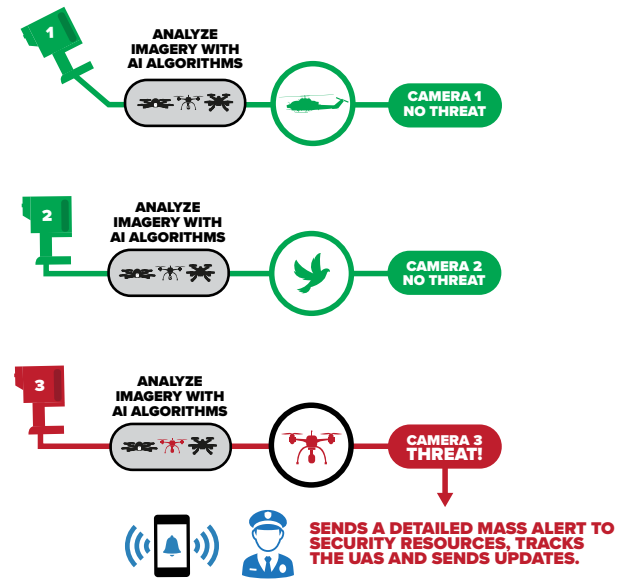
2. IDENTIFY

Instantly analyze imagery using AI algorithms to determine type of aircraft.

3. ALERT

Automatically notify security officials via text message or email showing location and type of aircraft.

How Exigent-DR Works



Rugged EOIR Sensors

High resolution optics with pan/tilt and zoom capability.

Optimal Sensor Planning / Scheduling Algorithms

Optimally plans and tasks one or more sensors simultaneously.

AI Fusion-Based Detection and Identification

Low false alarm rates, high detection and identification accuracy.

3D Track State Estimation

Reports position, velocity and covariance.

Distributed or Centralized Operation

Single operations center or multi-vehicle cooperative CONOPs.

LOGISTICS & LICENSING

Exigent-DR is a standalone unit installed by Exigent.

Exigent-DR is licensed on a subscription basis.

REQUIREMENTS

Access to internet and 110V power

SECURITY / OPERATION

Exigent®-DR security features include role-based login, application authentication and message encryption. Further, the Exigent-DR Application Programmer's Interface (API) operates inside a docker container isolating the API from the rest of the system as an extra layer of security, while ensuring the software does not conflict with other required system dependencies.

Training is provided on how to operate Exigent-DR, and how to understand the output, with onsite training available. A training manual is provided, and Exigent provides call center support as well.

PRODUCT DETAILS

Product Name	Exigent®-DR
Version	2020
Manufacturer Part Number	A2020EXDR
Product Type	SAAS

As a security-focused company, Exigent provides proven AI-based solutions to protect against threats including guns and aircraft (fixed wing and rotary wing). Today's world is consumed with digital images, but prior to Exigent assessing those images quickly and efficiently was a limitation for security response based on computer vision. By leveraging deep learning and long-short-term memory networks to analyze sensor data, Exigent uses proprietary computer vision technology to extend the benefits of AI to security applications. With the ability to autonomously and accurately detect targets of interest, Exigent is designed to protect lives and property.