

Applying Artificial Intelligence to identify Unmanned Aerial Systems (UAS) as early as possible to save lives and protect resources.



OVERVIEW

Artificial intelligence-based capability detects UAS 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 UAS 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 pro-active solution is needed to detect UAS threats to allow an effective defense. Exigent-DR, an artificial intelligence-based UAS detection capability developed by Arcarithm for the US Army, offers that solution.

Exigent®-DR provides a reliable, integrated method to:

Detect — autonomously detects UAS against any background, day or night.

Identify — instantly analyzes imagery using AI algorithms to determine type of UAS.

Alert — automatically notifies security officials via text message or email showing location and type of UAS.

Track — follows the UAS location in real time.

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.