



BASILISK™

UAS/Swarm Detection and Tracking



Basilisk is a passive electro-optical unmanned air system (UAS) detection and tracking device providing modular 360-degree coverage against individual UAS and multiple swarms in high clutter. Basilisk consists of a modular sensor head, ruggedized off-board processor, and commercial off-the-shelf hardware paired with advanced ML algorithms. Running multiple neural network classifiers results in enhanced detections and tracking with low false alarm rates and high detection confidence. Basilisk can be a stand-alone sensor or integrated with another CUAS solution.

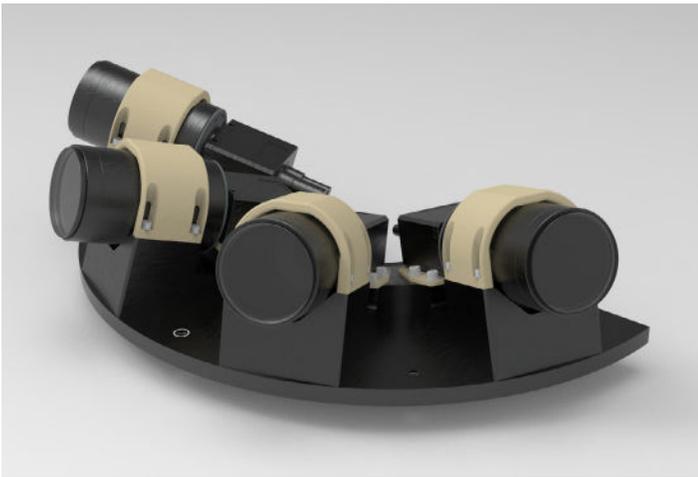
Key Features

- Completely passive operations, undetectable
- Simultaneous tracking and classification of hundreds of small UAS and swarm targets at 5km
- Reliable detection and tracking in high clutter environments, requires 2 pixels per detection
- Low Size, Weight, Power, and Cost (SWaP-C)
- Commercial Off-The-Shelf (COTS) hardware for cost-effective scalability
- Modular design supports many different deployment configurations and rapid setup



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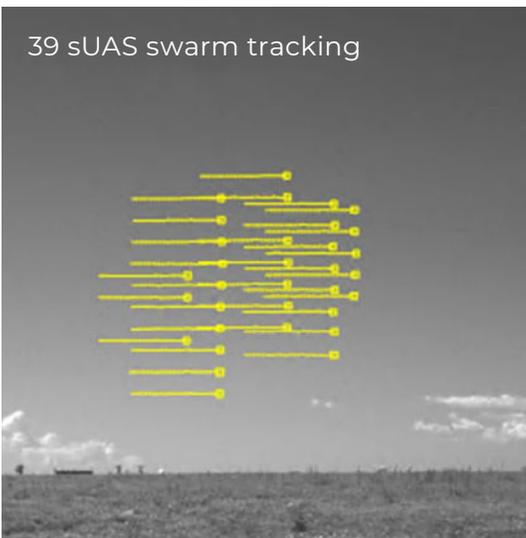


Technical Specification

Field of View	360 degrees x 45 degrees
Instantaneous Field Of View (IFOV)	171 μ rad
Refresh Rate	5 Hz
Detection Range	5 km (Assumes RQ-20 Puma Class 1 UAS)
Size (Sensor)	16.5 inch diameter x 4.2 inch height
COE (Common Operating Environment) Outputs	ISA / COT
Computer Size	7.5in x 15in x 7.5in
Computer Weight	17.2 lbs
Computer Rating	MIL-STD 810G Compliant
Unit Weight	~20 pounds
Power	<400W for a 180deg FOV system

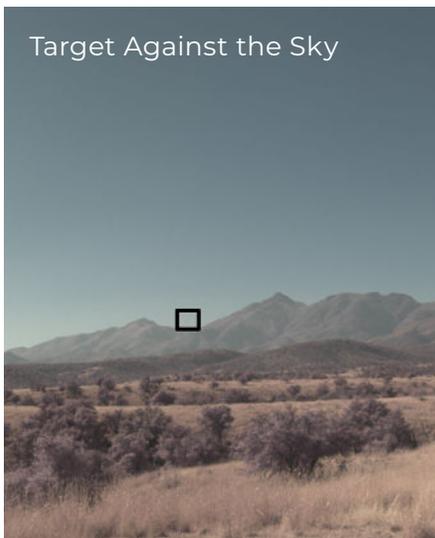
Simultaneous Drone Detection

39 sUAS swarm tracking

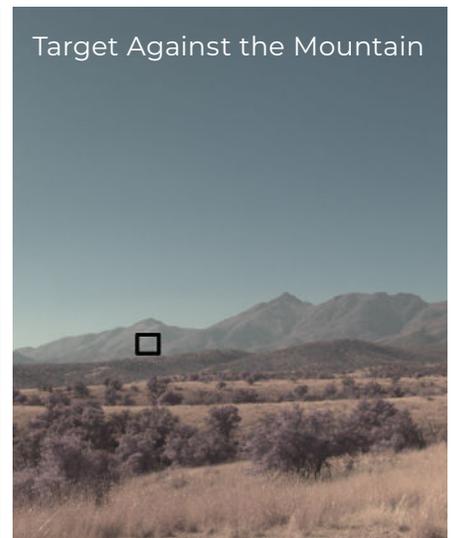


Robust Detection in Variable Clutter

Target Against the Sky



Target Against the Mountain



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