



# BASILISK®

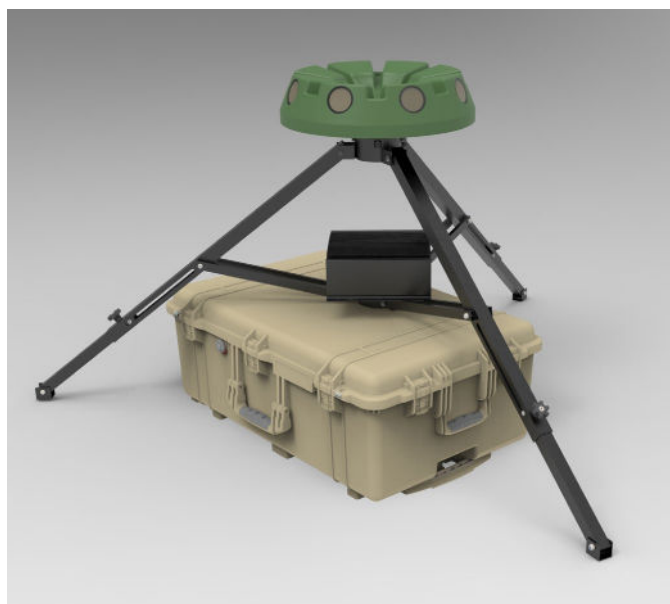
## UAS/Swarm Detection and Tracking



Basilisk is an unmanned air systems (UAS) detection and tracking device. Basilisk is a tethered system providing 360 degree coverage with a ruggedized offboard processor. This enables dynamic day operations and deployments. Basilisk uses multiple neural network classifiers resulting in low false alarm rate and high detection confidence. Basilisk uses commercial off-the-shelf hardware in a unique configuration paired with advanced ML algorithms for enhanced detection and tracking of UAS's and UAS swarms.

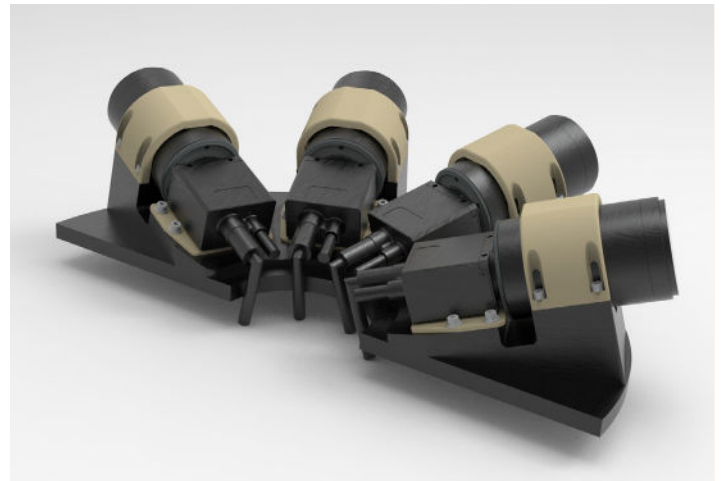
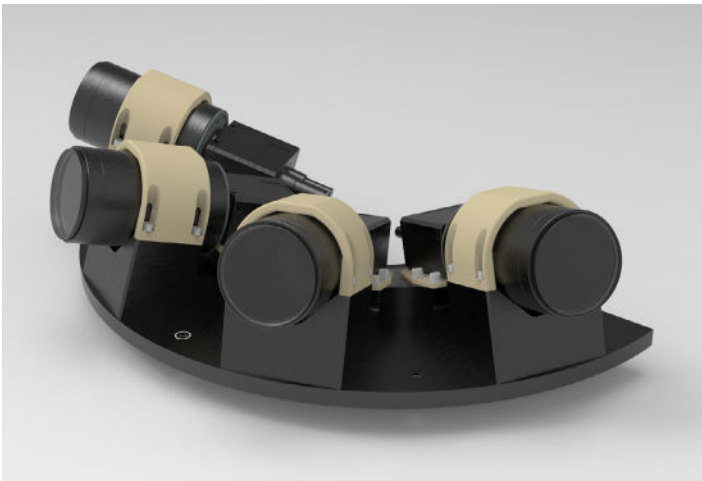
### Key Features

- Completely passive operations, undetectable via RF sensing
- Simultaneous tracking and classification of hundreds of targets at 5km
- Detection and tracking in high clutter environments
- Low Size, Weight, Power, and Cost (SWaP-C)
- Commercial Off-The-Shelf (COTS) hardware
- Modular design supports many different deployment configurations



Areté | 9301 Corbin Ave. Northridge, CA 91324 | [arete.com](http://arete.com)  
Technical POC | Dr. Rees McNally, (303) 868-2920 | [rmcnally@arete.com](mailto:rmcnally@arete.com)  
Business POC | Scott McGill, (512) 565-8508 | [smcgill@arete.com](mailto:smcgill@arete.com)  
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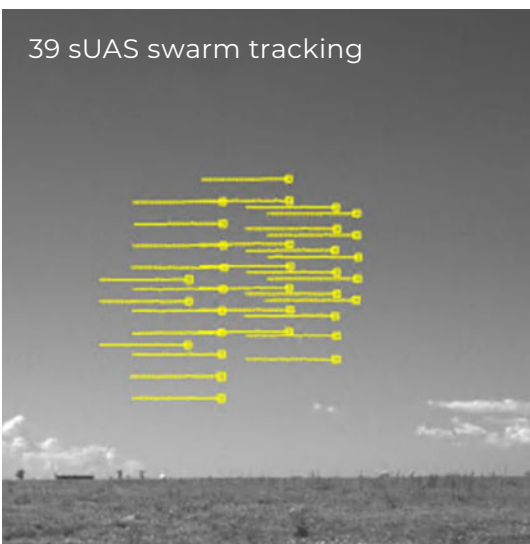


## Technical Specification

Field of View .....	360 degrees x 45 degrees
Instantaneous Field Of View (IFOV) .....	171 $\mu$ 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

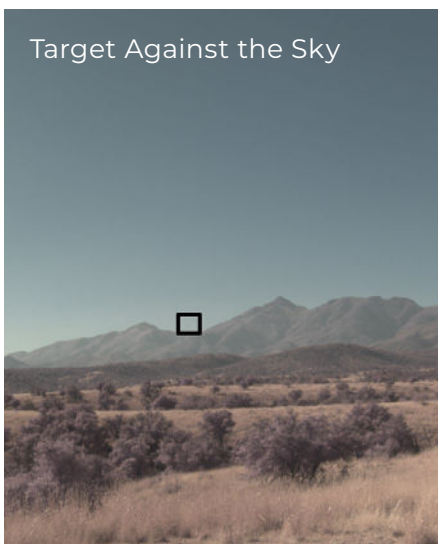
### Simultaneous Drone Detection

39 sUAS swarm tracking

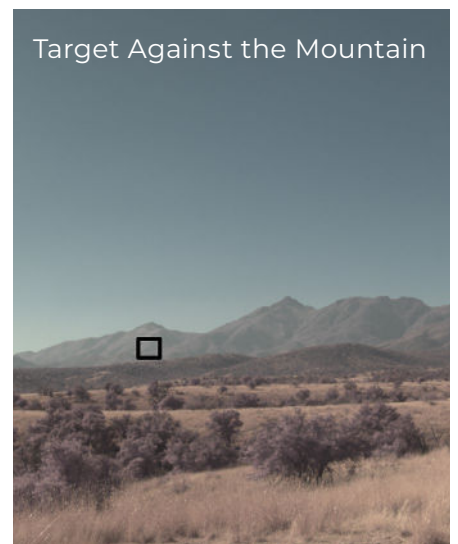


### Robust Detection in Variable Clutter

Target Against the Sky



Target Against the Mountain



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 Technical POC | Dr. Rees McNally, (303) 868-2920 | [rmcnally@arete.com](mailto:rmcnally@arete.com)  
 Business POC | Scott McGill, (512) 565-8508 | [smcgill@arete.com](mailto:smcgill@arete.com)  
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