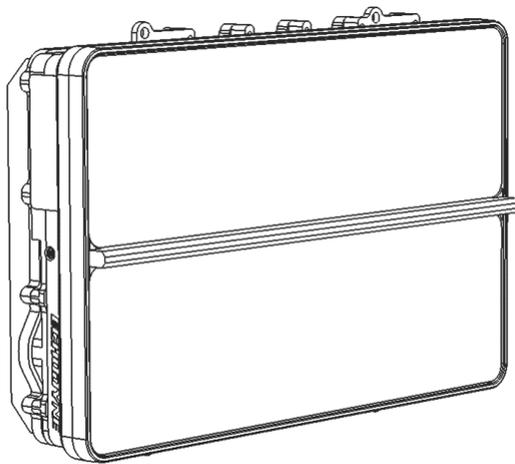


# MESA-DAA

Airborne Detect And Avoid radar for small to medium UAVs enables safe beyond visual line of sight operations



>2km



>750m



>200m

## Features and Benefits

Long-range radar, enabling reliable DAA with early warning in all environments and conditions.

Wide field-of-view and real beam scanning in azimuth and elevation.

Full track while scan capability provides ultra-high confidence detection and tracks, even in dense airspace or over cluttered environments.

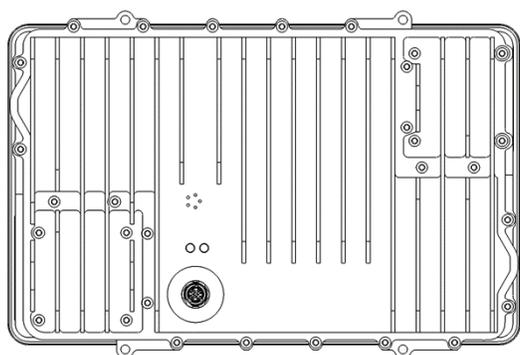
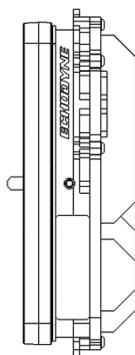
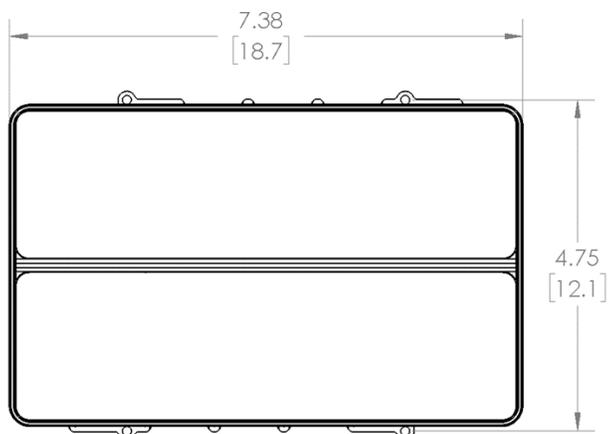
Digital FMCW radar provides calibration-free plug-and-play easy integration with all platforms.

Highly configurable with multiple data output options.

i-SCAN™ intelligent beam-scan software leverages situational awareness and mission models.

Phased array like performance, at a tiny fraction of the C-SWAP.

# MESA-DAA



## Performance

Operational range	3.4km
Range (Cessna)	>2km
Range (sUAV)	>750m
Range (birds)	>200m
Field of view	≥120° Azimuth x 80° Elevation
Range resolution	3.5m
Angle resolution	±1° Azimuth x ±3° Elevation
Velocity resolution	2 m/s
Center frequency	24.55 GHz

## Track While Scan

Scan volume	User configurable within FOV
Scan update rate	~1Hz for 120° Az x 40° El volume
Track acquisition rate	New tracks acquired in <1sec
Track while scan	Up to 10 tracks updating at 2Hz, dynamically allocated via i-SCAN.
Max tracks	Up to 20 simultaneous tracks
Modes	Echodyne i-SCAN™ intelligently allocates beam resources based on user-defined prioritization options.

## SWAP and Environmental

Size	18.7cm x 12.1cm x 4cm
Weight	730g (forced air cooling) 817g (convection cooling)
Power	DC +9V to +28V Operating 35W Hot standby <7W Hibernate TBR <100mW
Operating temp	-40°C to +75°C
Weather	IP68 including connector

## Integration and Data

Control I/O	Gigabit Ethernet
Power I/O	Snap lock 12 pin connector
Data Outputs	Range-Doppler point cloud (40Mb/s) Detections only (≤1Mb/s) Tracks only (≤14kb/s)

## FCC

This device has not yet been authorized by the Federal Communications Commission, and there are restrictions on its sale and use until authorization is obtained.