

# Radar for the Future Force

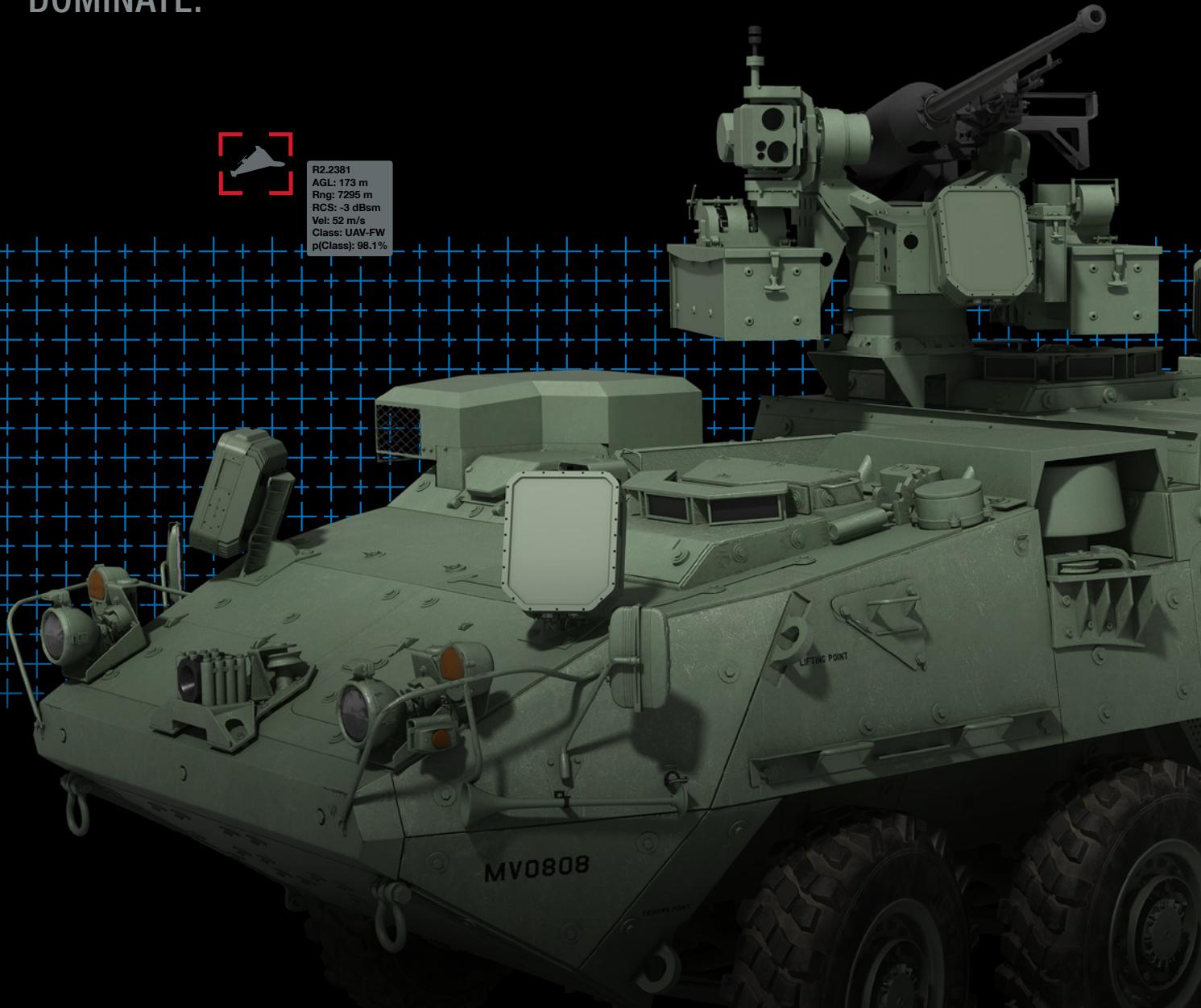
DETECT MORE.

DECIDE FASTER.

DOMINATE.



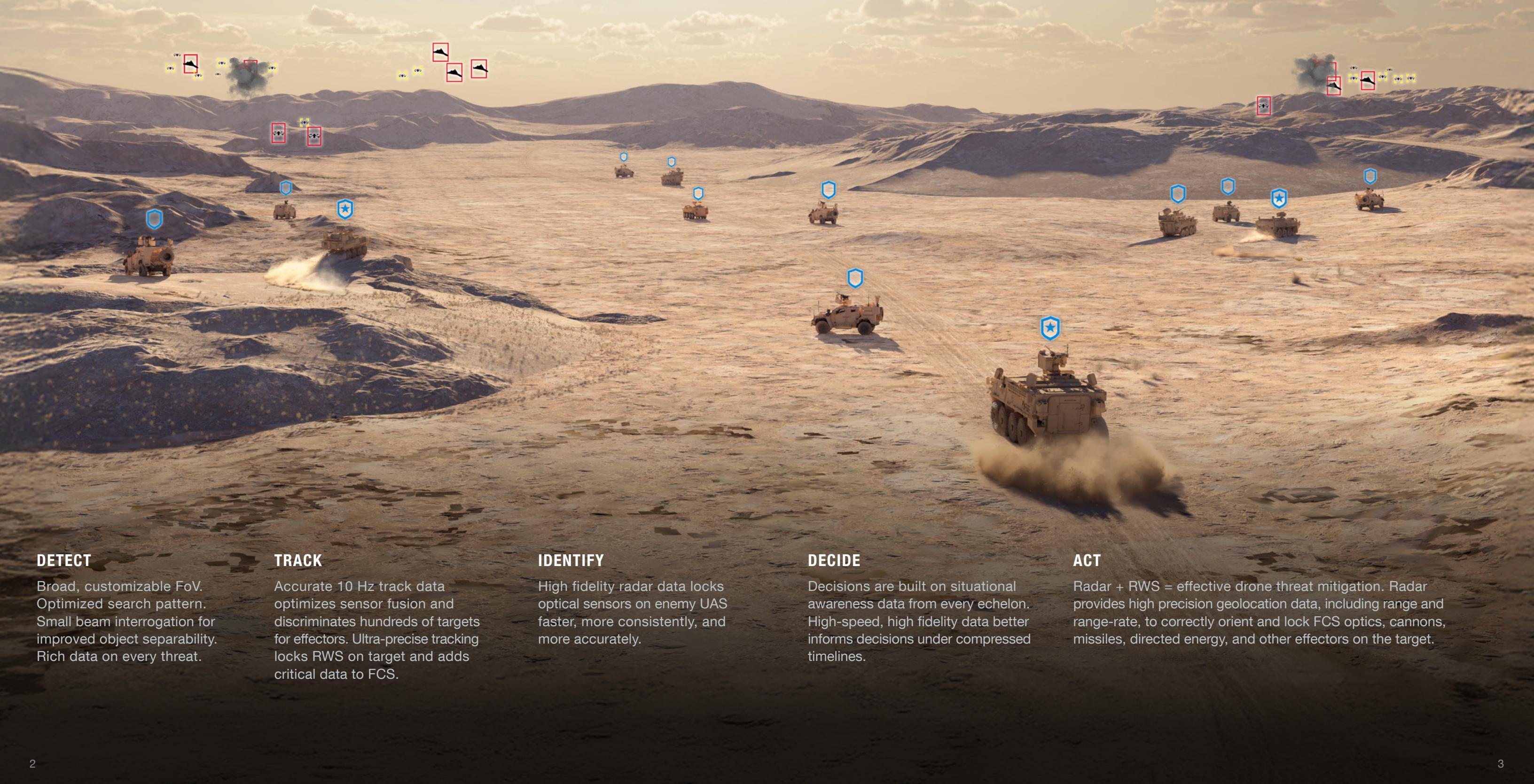
R2.2381  
AGL: 173 m  
Rng: 7295 m  
RCS: -3 dBsm  
Vel: 52 m/s  
Class: UAV-FW  
p(Class): 98.1%



# Counter-UAS Radar Excellence

Rapidly Scale, Evolve, Maneuver

-  Sensor Vehicle
-  Weapon Vehicle
-  Targeted UAS
-  Tracked UAS



## DETECT

Broad, customizable FoV.  
Optimized search pattern.  
Small beam interrogation for improved object separability.  
Rich data on every threat.

## TRACK

Accurate 10 Hz track data optimizes sensor fusion and discriminates hundreds of targets for effectors. Ultra-precise tracking locks RWS on target and adds critical data to FCS.

## IDENTIFY

High fidelity radar data locks optical sensors on enemy UAS faster, more consistently, and more accurately.

## DECIDE

Decisions are built on situational awareness data from every echelon. High-speed, high fidelity data better informs decisions under compressed timelines.

## ACT

Radar + RWS = effective drone threat mitigation. Radar provides high precision geolocation data, including range and range-rate, to correctly orient and lock FCS optics, cannons, missiles, directed energy, and other effectors on the target.

# Trusted by Defense Forces Worldwide

Mission Ready. Combat Proven.

C-UAS  
OTM  
ISR  
RWS

FORCE PROTECTION  
BASE SECURITY  
SPECIAL OPERATIONS  
CONVOY SECURITY



Layered Force Protection. Ultra-low SWaP for all-domain ISR.

Multi-Mission. Multi-Domain. Multi-Modal.

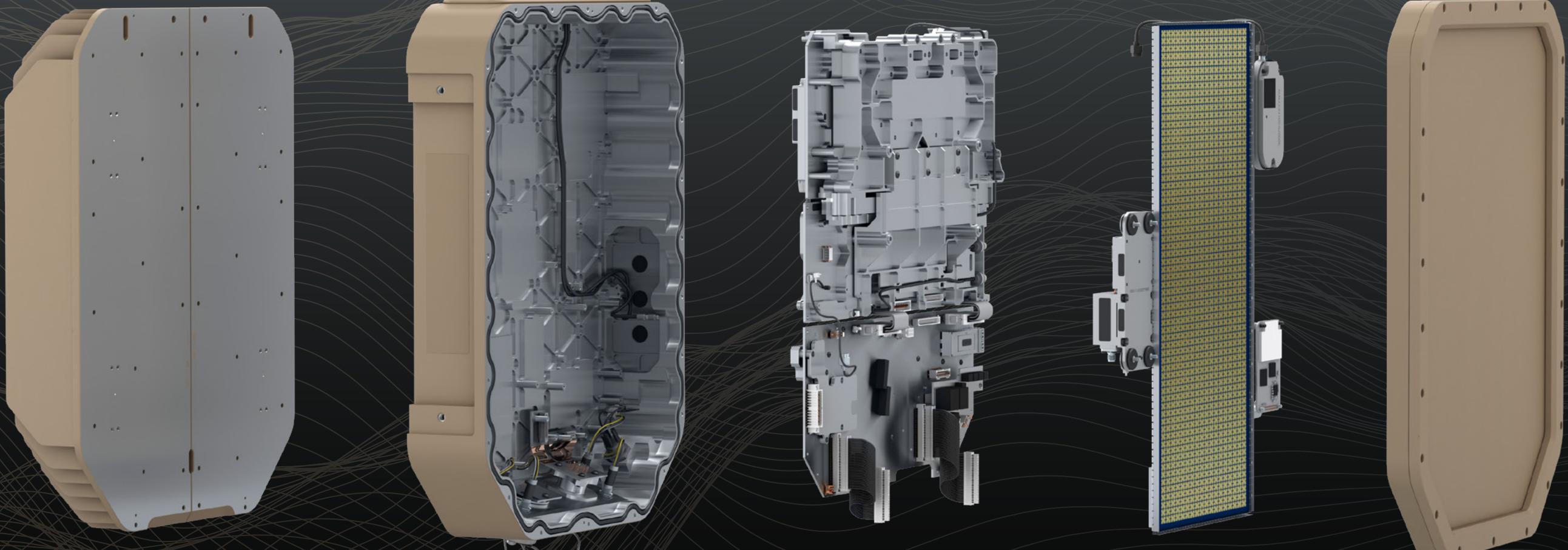
# Better by Design

## MESA®

Patented physics-design approach shatters design barriers to miniaturizing ESA radar. MESA creates industry-leading ultra-low SWaP ESA radars with commercial pricing and availability.

## Software-defined

Software is the foundation for adaptable multi-mission, multi-domain, multi-modal radar. On-radar processing combined with off-radar networking and protocol conversion.



### ACCURACY

Highest angular accuracy (azimuth and elevation). Consistently slews optical sensors, locks RWS effectors with 10 Hz precision track data, and pinpoints every object of interest.



### CLASSIFICATION

Smarter radar leads to smarter systems. Superior AI-based classification models discriminate every detail in every scene.



### MOBILITY

Same advanced radar performance for every modality: fixed, temporary, portable, or on-the-move (OTM), on land, sea, or in the sky.



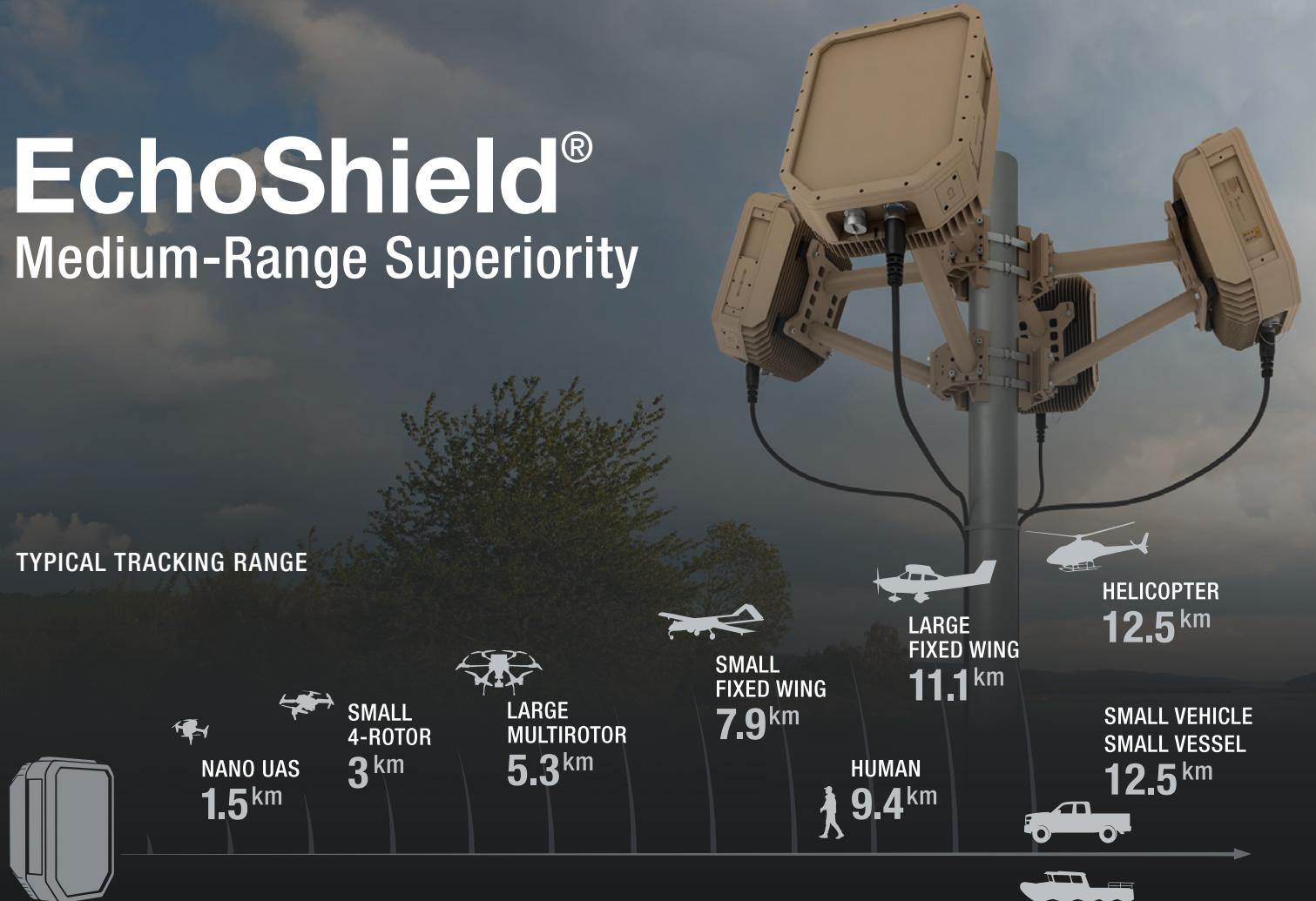
### COGNITIVE/ NETWORKING

Seamless networks of radars. Waveform and beam scheduling adaptive to external sensors and systems. Future-ready.

# EchoShield®

## Medium-Range Superiority

### TYPICAL TRACKING RANGE



**SIZE**  
42.9 x 32.9 x 18.7 cm  
16.9 x 12.9 x 7.4 in

**WEIGHT**  
19.2 kg  
42.3 lbs

**POWER**  
+20 to +33 VDC  
(+28 V nominal)  
<250 W Operating

**FREQUENCY**  
15.4 – 16.6 GHz

**FIELD OF VIEW**  
130° Az x 90° El

**TRACK ACCURACY**  
< 0.5° Az x < 0.5° El

**TRACK UPDATE RATE**  
10Hz

**MAX TRACKS**  
> 1,000 Objects of Interest



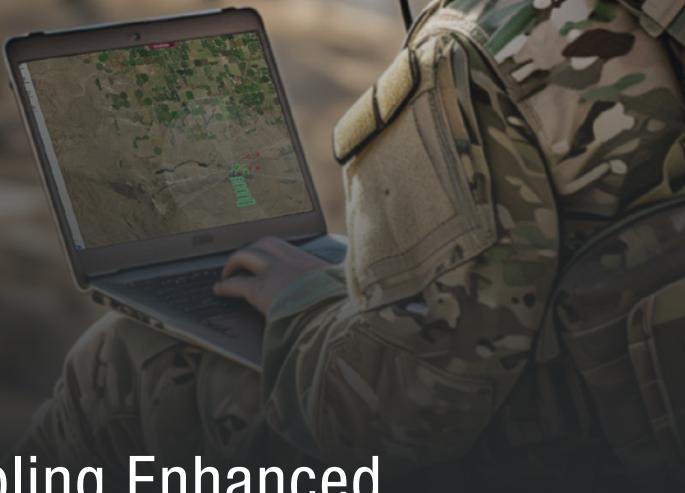
## Kits & Accessories

**Quick Start Kit**  
**Tower Mount Kit**  
**Rapid Deployment Kit**

# EchoWare

## Advanced Software for MESA Radar

Intuitive UI  
Seamless Radar  
Single Track ID  
Fixed, Temporary, OTM



## Powerful Software Platform Enabling Enhanced Cognitive Radar Capabilities



EchoWare combines advanced MESA capabilities with powerful off-radar software to deliver an abstraction layer that seamlessly integrates multiple (n) Echodyne radars into a single radar instance.

One interface to the radar network. A single interface to manage all radars. A single Track ID for each object, regardless of number of radars in the network. One software platform for every modality – fixed, portable, temporary, or on-the-move (OTM).

## Technical & Software Support

Companion package with dedicated tech support and continuous software improvements.



### PRIORITY TECHNICAL SUPPORT

Priority queuing via company match when using [support@echodyne.com](mailto:support@echodyne.com).



### CUSTOMER PORTAL

24/7 access to all tools, manuals, and materials.



### PERFORMANCE ENHANCEMENT

Continuous improvements through software development.



### USER COMMUNITY

Submit requests for features and functionality.

# EchoGuard®

## Short-Range Dominance

### TYPICAL TRACKING RANGE



**SIZE**  
16.3 x 20.3 x 5.7 cm  
6.4 x 8 x 2.3 in

**WEIGHT**  
1.25 kg  
2.8 lbs

**POWER**  
+15 to +28 VDC  
50 W Operating

**FREQUENCY**  
24.45 - 24.65 GHz (USA)  
24.05 - 24.25 GHz (INTL)

**FIELD OF VIEW**  
120° Az x 80° El

**TRACK ACCURACY**  
< 1° Az x < 1.5° El

**TRACK UPDATE RATE**  
10Hz

**MAX TRACKS**  
Up to 20 Simultaneous



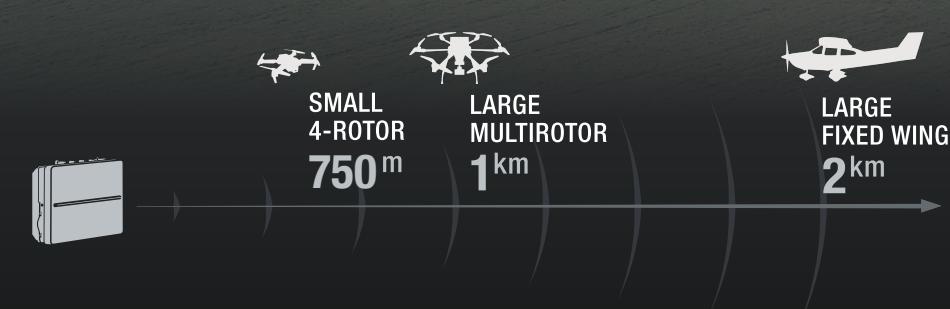
## Kits & Accessories

- Quick Start Kit
- Tower Mount Kit
- Radar Hub
- Lightweight Deployment Kit

# EchoFlight®

## Lightweight Airborne CUAS

### TYPICAL TRACKING RANGE



**SIZE**  
12.1 x 18.7 x 4.1 cm  
4.8 x 7.3 x 1.6 in

**WEIGHT**  
819g  
1.8 lbs

**POWER**  
+ 12 to + 28 VDC  
45 W Operating

**FREQUENCY**  
24.45 - 24.65 GHz

**FIELD OF VIEW**  
120° Az x 80° El

**TRACK ACCURACY**  
< 1° Az x < 1.5° El

**TRACK UPDATE RATE**  
10Hz

**MAX TRACKS**  
Up to 20 Simultaneous

## Technical & Software Support

Companion package with dedicated tech support and continuous software improvements.



### PRIORITY TECHNICAL SUPPORT

Priority queuing via company match when using [support@echodyne.com](mailto:support@echodyne.com).



### CUSTOMER PORTAL

24/7 access to all tools, manuals, and materials.



### PERFORMANCE ENHANCEMENT

Continuous improvements through software development.



### USER COMMUNITY

Submit requests for features and functionality.



Echodyne, the radar platform company, is a U.S. designer and manufacturer of advanced commercial radar systems for defense, government, and commercial market applications. The company combines patented metamaterials electronically scanned array (MESA) architecture with powerful software and machine learning to deliver high fidelity situational awareness data pinpointing activity in air and surface domains with unrivaled speed, accuracy, and precision. Proven and trusted by militaries, agencies, integrators, and critical infrastructure across the globe, Echodyne's products set a new standard for radar excellence. Privately held, the company is headquartered in Kirkland, WA, USA and backed by Bill Gates, NEA, Madrona Venture Group, Baillie Gifford, Northrop Grumman, and Supernal, among others.

See radar in action at [Echodyne.com](https://Echodyne.com).

