

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



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.



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

C-UAS

OTM

ISR

RWS

FORCE PROTECTION

BASE SECURITY

SPECIAL OPERATIONS

CONVOY SECURITY

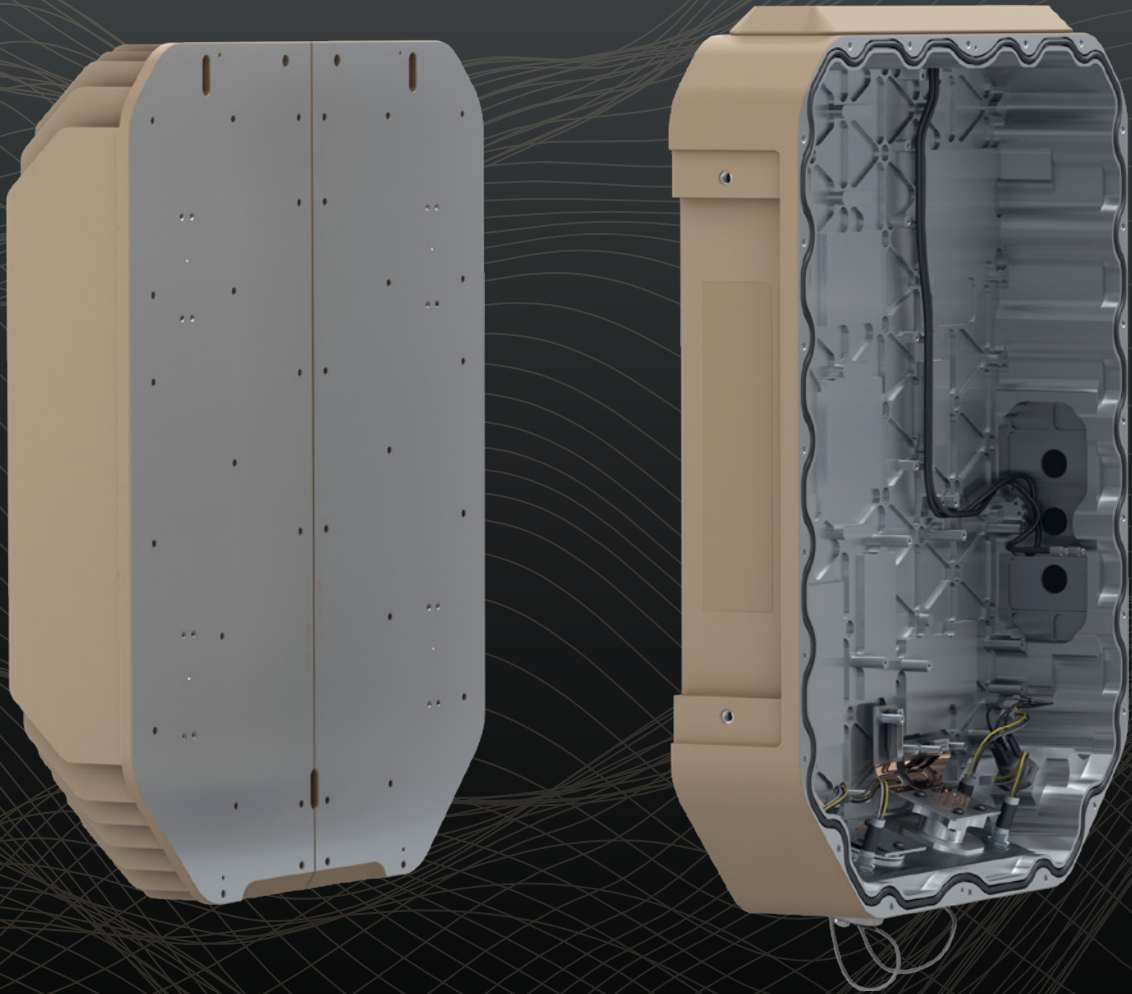


Multi-Mission. Multi-Domain. Multi-Modal.

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.



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.

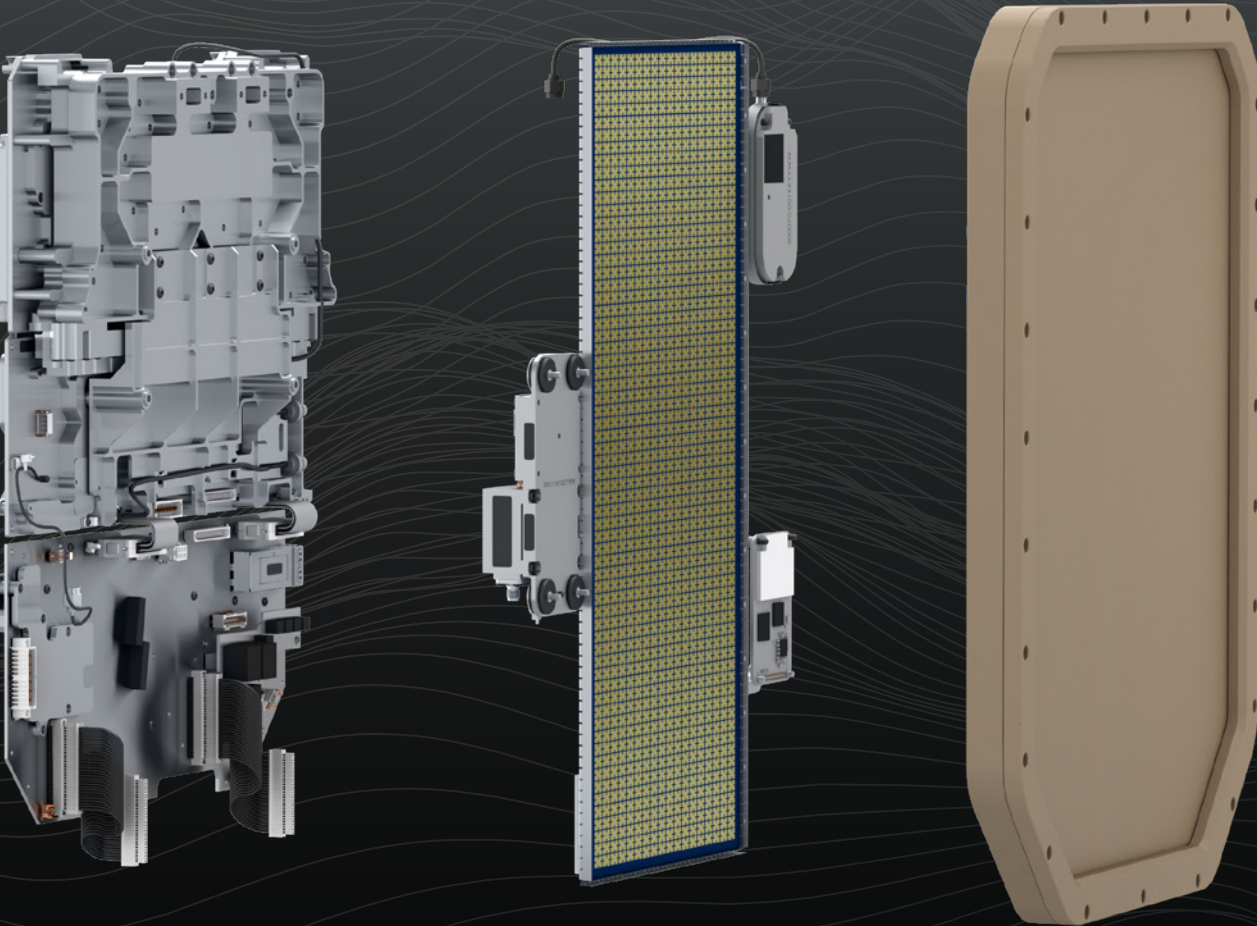


CLASSIFICATION

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

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.



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

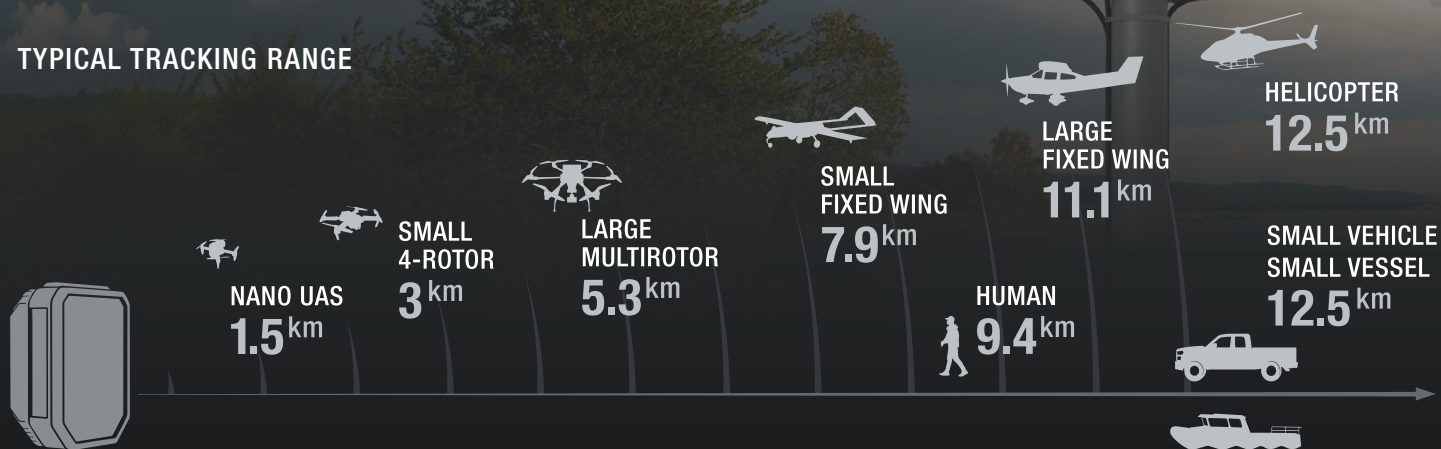
Seamless networks of radars. Waveform and beam scheduling adaptive to external sensors and systems. Future-ready.

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

10 Hz

MAX TRACKS

>1,000 Objects of Interest



Kits & Accessories

Quick Start Kit

Tower Mount Kit

Rapid Deployment Kit



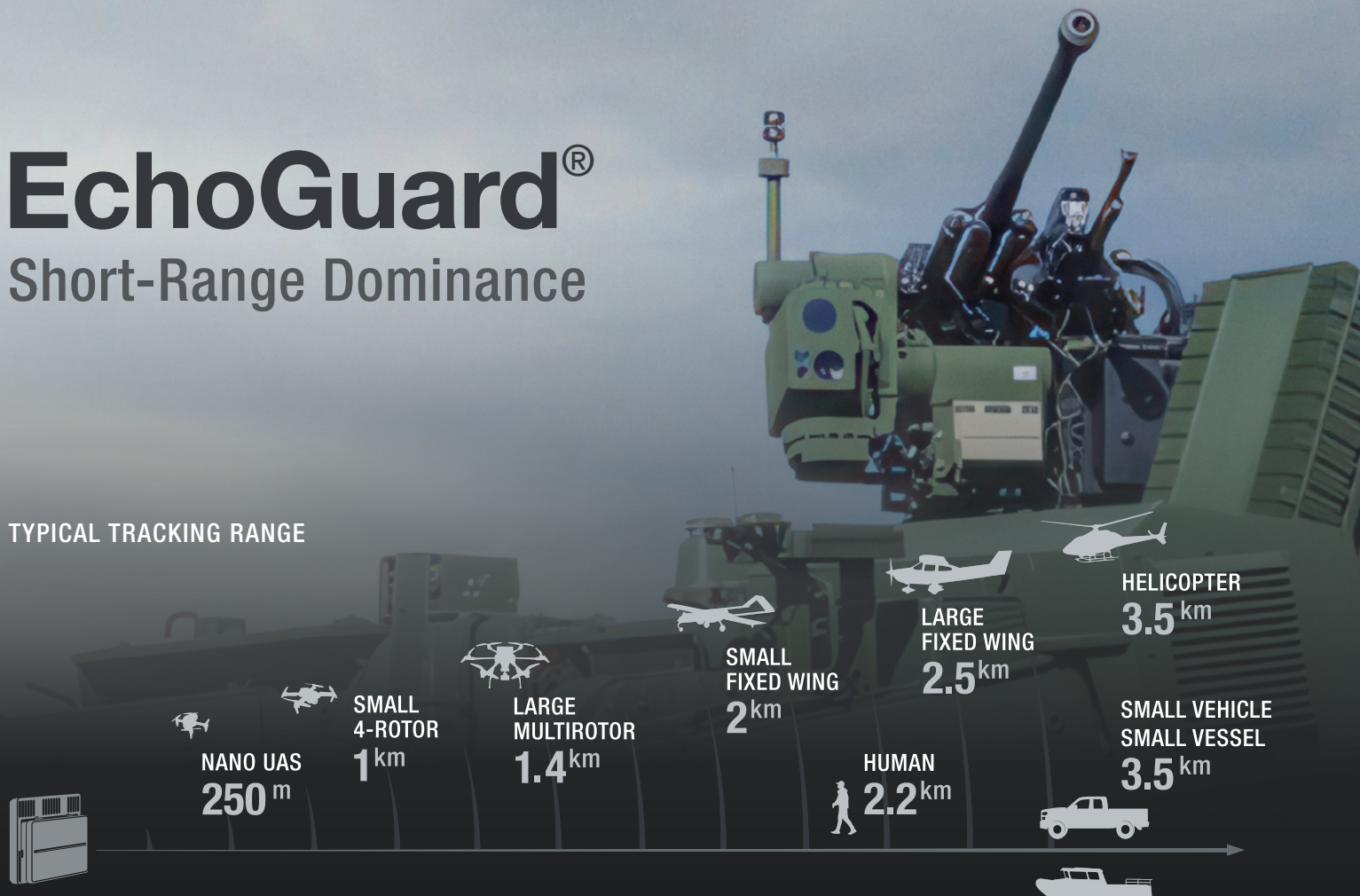
Technical & Software Support

Companion package with dedicated tech support and continuous software improvements.

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

10 Hz

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

819 g
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

10 Hz

MAX TRACKS

Up to 20 Simultaneous



Technical & Software Support

Companion package with dedicated tech support and continuous software improvements.





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 unrivalled 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).

