

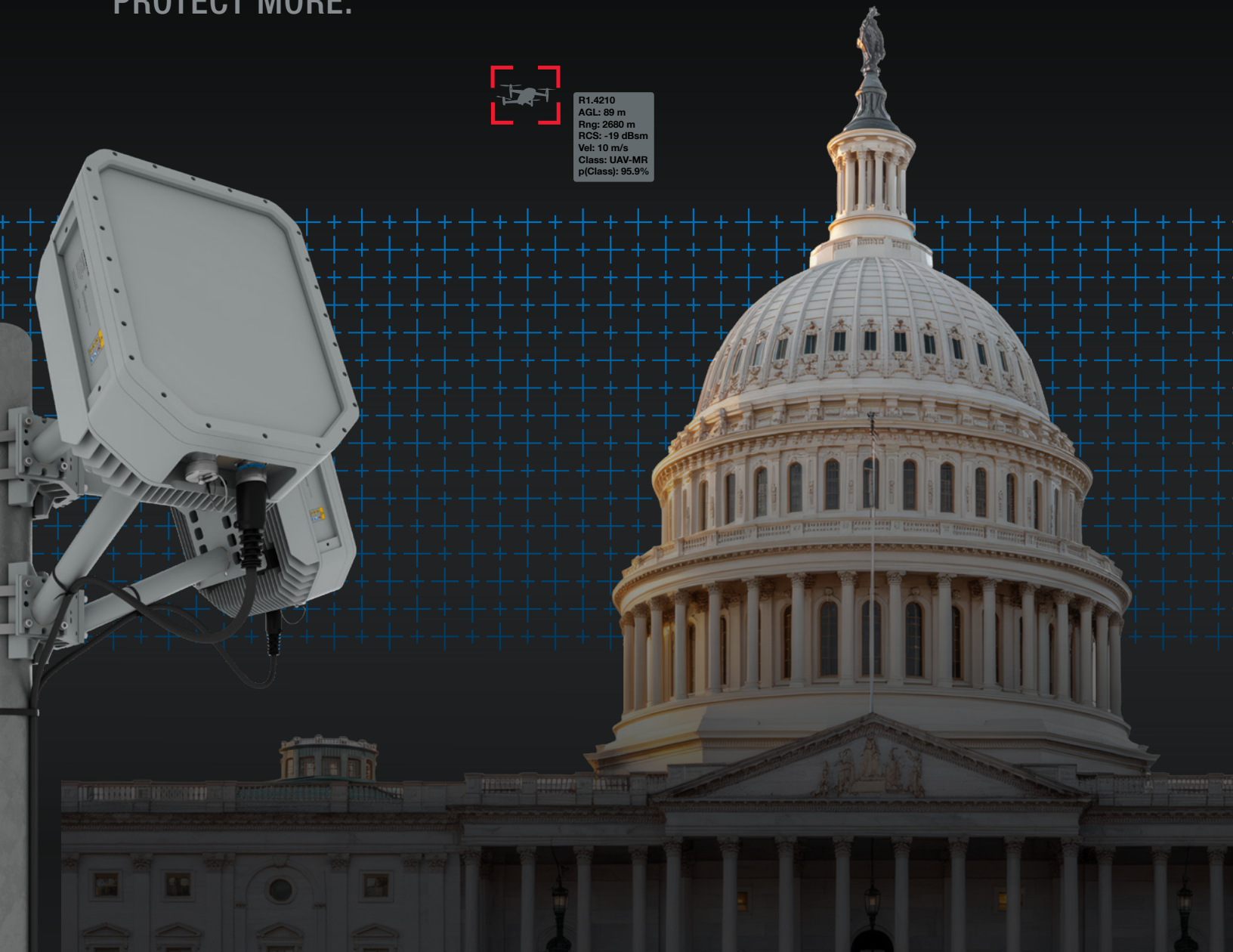
ECHODYNE
RADAR REINVENTED™

Advanced Radar for National Security

KNOW SOONER.
RESPOND SMARTER.
PROTECT MORE.



R1.4210
AGL: 89 m
Rng: 2680 m
RCS: -19 dBsm
Vel: 10 m/s
Class: UAV-MR
p(Class): 95.9%



Secure the Airspace

UAS dominance with radar-driven intelligence.



DETECT

Direct attention when and where it matters most while reducing operator fatigue through clutter mitigation and advanced object discrimination.

TRACK

Industry-leading track accuracy locks surveillance on potential threats and maintains heightened and focused situational awareness.

IDENTIFY

Sensor fusion provides the clearest picture of the airspace, with radar maintaining optical sensor lock and advanced classification accelerating identification of UAS intruders.

Trusted for Counter-UAS protection by dozens of government agencies around the world, Echodyne radars reliably deliver airspace domain awareness with pinpoint precision. Multi-object detection, high-fidelity tracking, and classification give national security, government agencies, and public safety teams the clarity to identify faster and act with confidence.



DECIDE

Data-rich environments built on multi-sensor solutions create a comprehensive operational picture. Radar directly and indirectly frames the facts and data for rapid, confident decisions.

ACT

Accurate radar geo-positioning directs security, public safety teams, and mitigation platforms exactly where they're needed. Trusted, high-integrity data provides irrefutable time-and-location evidence to support legal action and accountability.

One Radar. Many Missions.

Trusted by U.S. and allied agencies to protect troops, borders, people, and critical assets.



From borders to urban areas, Echodyne radars provide dependable multi-domain surveillance in any terrain or climate. Integrated into your security ecosystem, high-fidelity radar data sharpens every sensor and improves every outcome.

**NATIONAL SECURITY
BORDER PROTECTION
ASSET SECURITY
EVENT PROTECTION**

**PERIMETER SECURITY
PUBLIC SAFETY
MOBILE PROTECTION**



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.

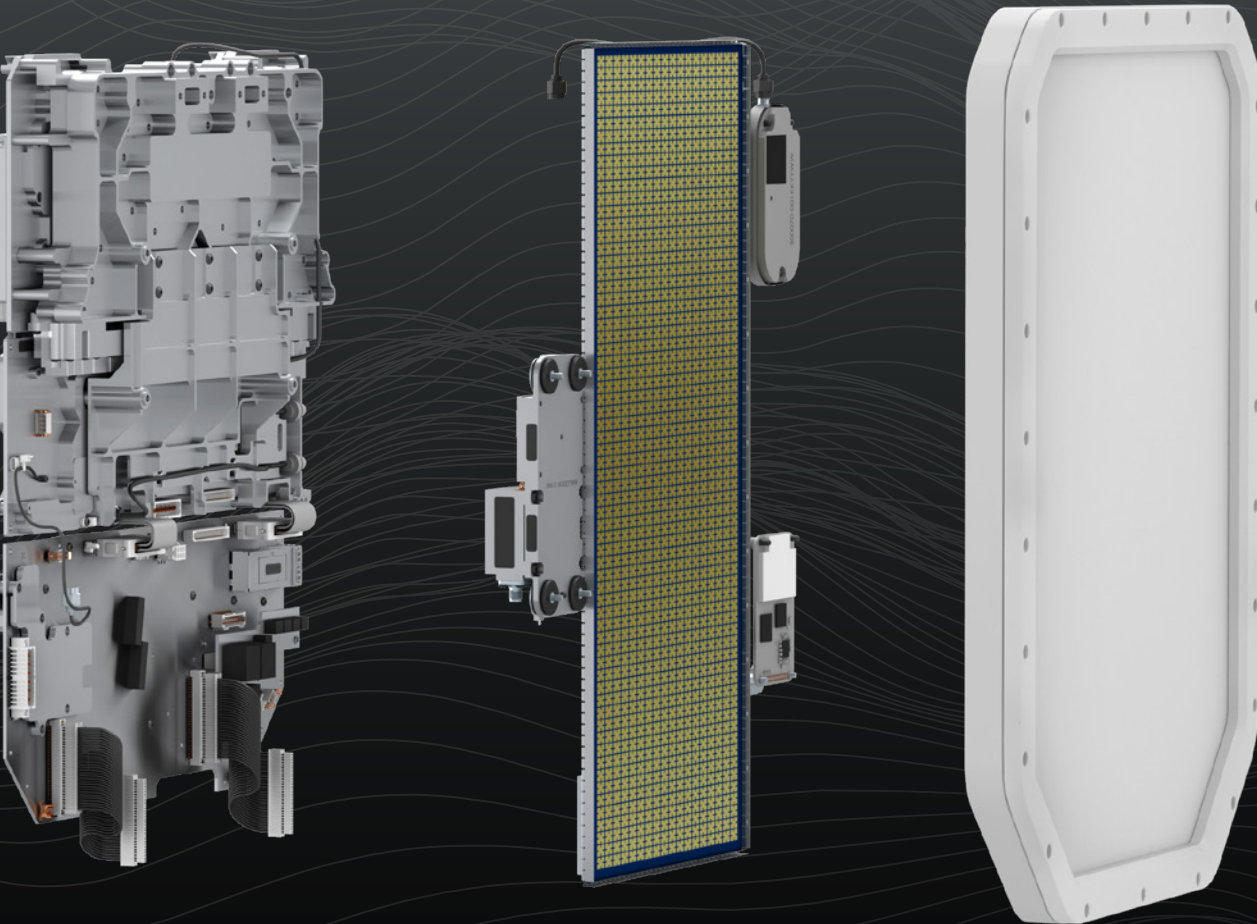


CLASSIFICATION

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®

EchoShield delivers multi-domain awareness tailored to the scale and complexity of government security for fixed, temporary, or on-the-move (OTM) missions. Proven and trusted as the primary sensor in platforms and solutions across the world, EchoShield's best-in-class performance safeguards expansive perimeters, protects convoys, and secures high-consequence sites.

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[®]

EchoGuard is proven in government security, national security and border operations, delivering dependable radar coverage in the most demanding environments. Compact and portable, it adapts easily to both urban and remote missions where heightened situational awareness and rapid deployment are equally essential. As a cornerstone in multi-sensor platforms, EchoGuard reliably monitors surface and air threats to enhance layered security operations.

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

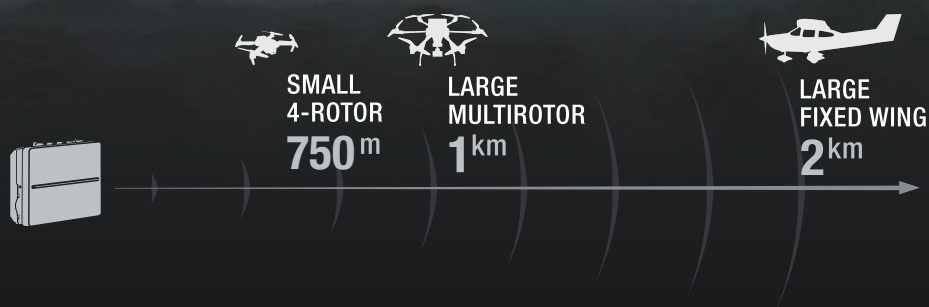


EchoFlight[®]

EchoFlight takes security vertical. Whether temporary or permanent, tethered drones, aerostats, and UAVs equipped with radar secure the perimeter anywhere, anytime.



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).

