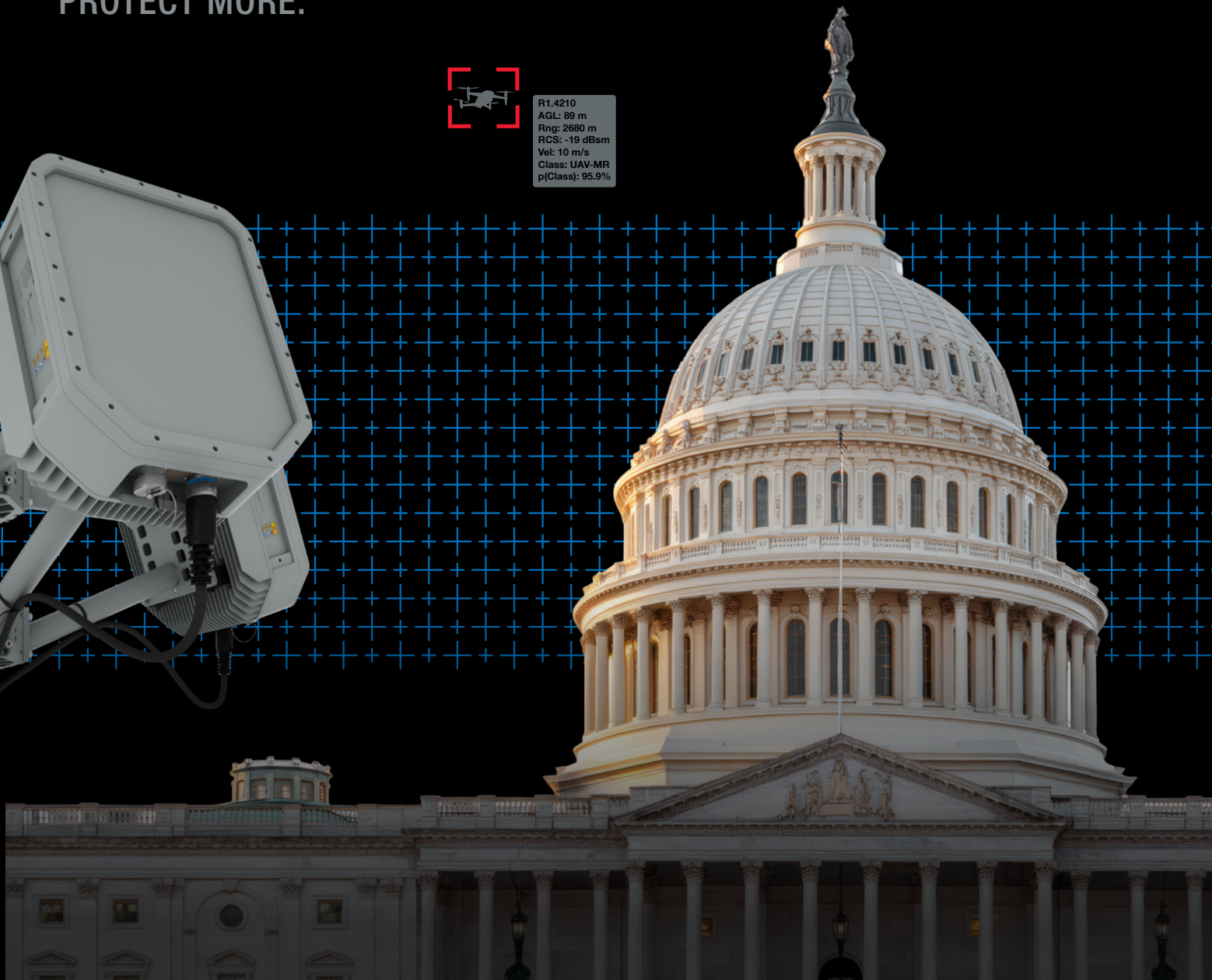


Advanced Radar for National Security

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.

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.



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.

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.

NATIONAL SECURITY
BORDER PROTECTION
ASSET SECURITY
EVENT PROTECTION

PERIMETER SECURITY
PUBLIC SAFETY
MOBILE PROTECTION



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.

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

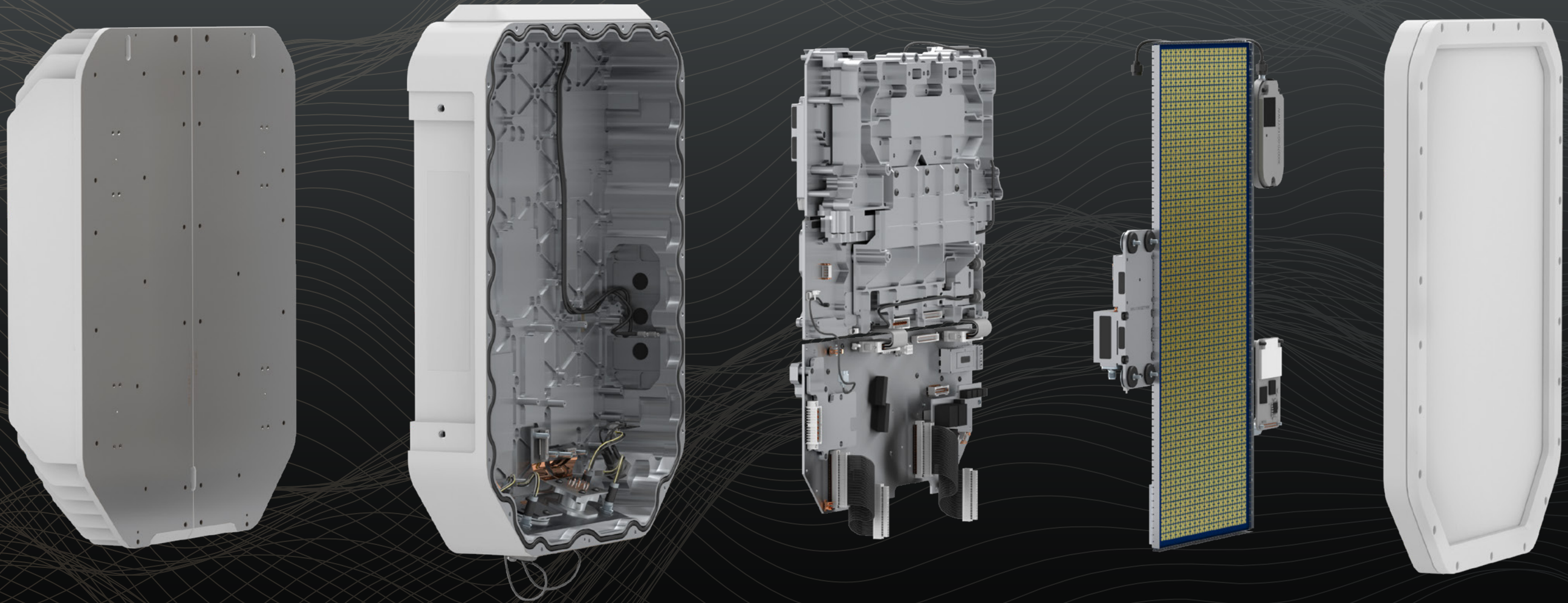
Better by Design

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.



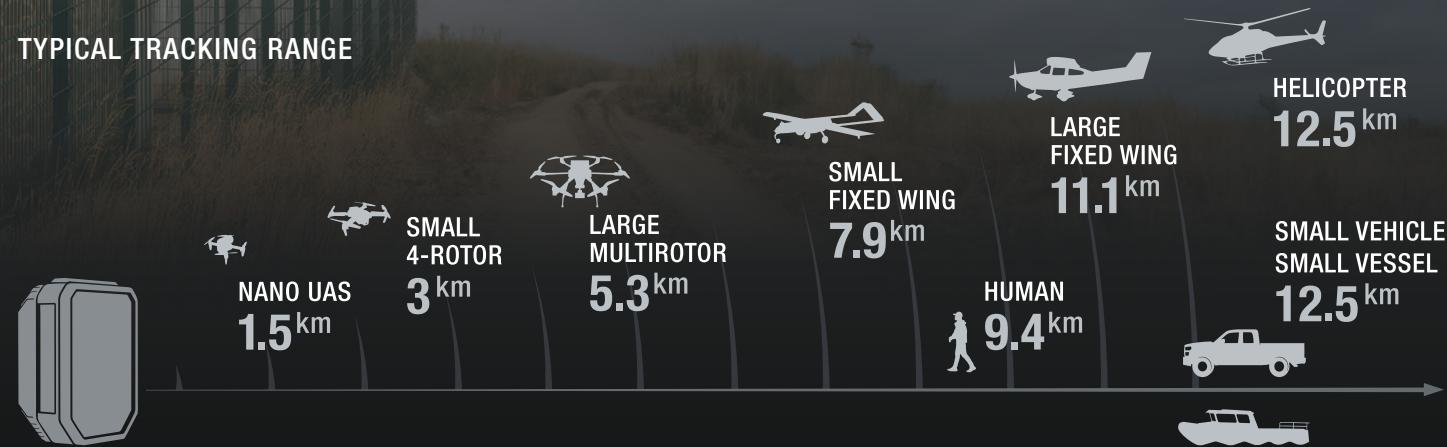
COGNITIVE/ NETWORKING

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

EchoShield®

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

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.



CUSTOMER PORTAL

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



PERFORMANCE ENHANCEMENT

Continuous improvements through software development.



USER COMMUNITY

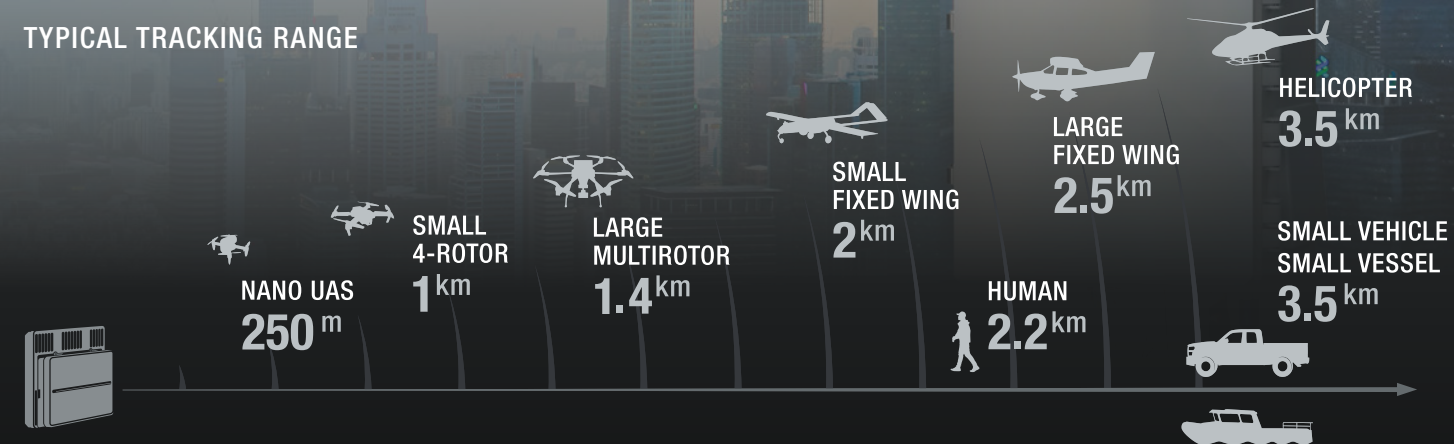
Submit requests for features and functionality.

EchoGuard[®]

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



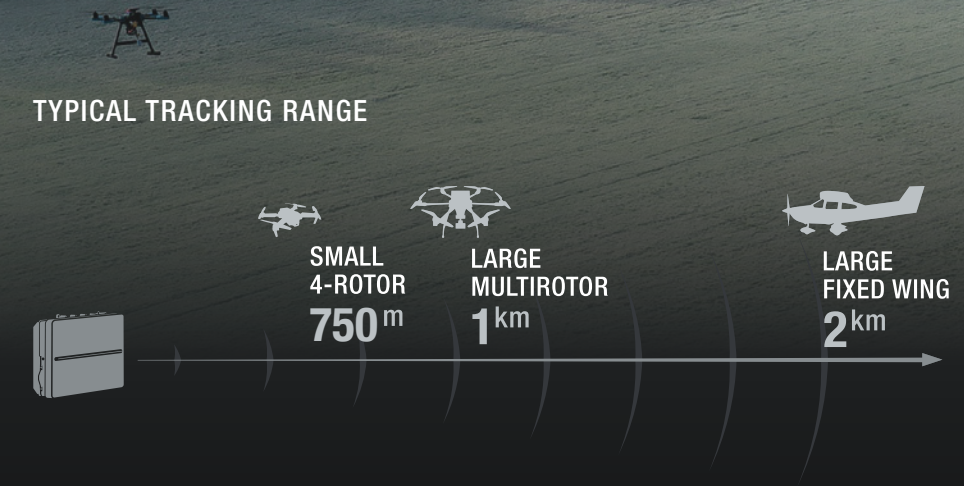
SIZE 16.3 x 20.3 x 5.7 cm 6.4 x 8 x 2.3 in	WEIGHT 1.25 kg 2.8 lbs	POWER +15 to +28 VDC 50 W Operating	FREQUENCY 24.45 - 24.65 GHz (USA) 24.05 - 24.25 GHz (INTL)
FIELD OF VIEW 120° Az x 80° El	TRACK ACCURACY < 1° Az x < 1.5° El	TRACK UPDATE RATE 10 Hz	MAX TRACKS Up to 20 Simultaneous

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



Kits & Accessories

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

Technical & Software Support

Companion package with dedicated tech support and continuous software improvements.

- PRIORITY TECHNICAL SUPPORT**
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- 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 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).

