

# EchoGuard

## 3D Surveillance Radar

*Ground-based, high-performance, small ESA radar for robust ground and airspace perimeter security systems*



Vehicles  
> 3.5 km



Humans  
> 2.2 km



Inspire II  
> 1 km



Phantom 4  
> 900 m



## OVERVIEW

High-performance small Electronically Scanned Array (ESA) radar detects and tracks ground and air threats simultaneously in all conditions. Based on innovative MESA™ technology, Echodyne radars deliver ESA performance at orders of magnitude lower size, weight, power, and cost (ultra-low SWaP-C). Industry-leading features include wide field-of-regard, real beam scanning in azimuth and elevation, search while track, and excellent range and accuracy. Echodyne's Acuity software suite offers calibration-free plug-and-play integration, digital configurability to suit different operators and missions, and multiple data output options, including rich raw data that only an ESA radar can generate.

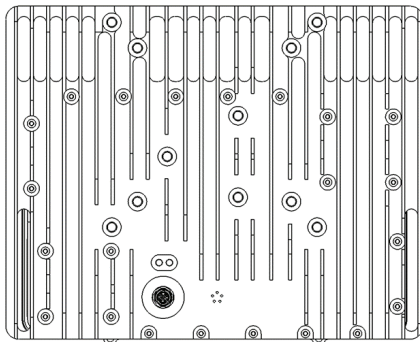
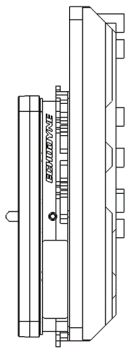
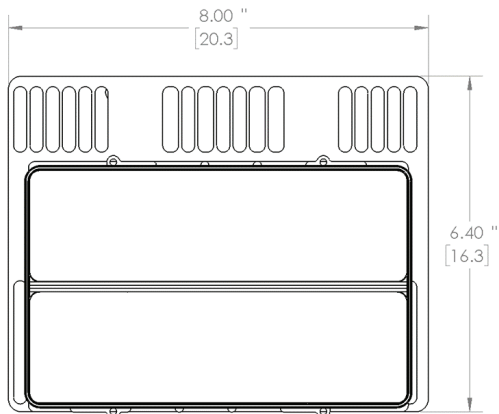
CONTACT

[info@echodyne.com](mailto:info@echodyne.com)  
+1.425.454.3246

Copyright © 2019 Echodyne Corp

# EchoGuard

## 3D Surveillance Radar



### Performance

Instrumented range	6 km
Range (sUAV)	> 900 m (Phantom 4) > 1 km (Inspire II)
Range (vehicles)	> 3.5 km
Range (humans)	> 2.2 km
Field of view	120° azimuth x 80° elevation
Angular Resolution	±1° (azimuth) x ±3° (elevation)
Frequency	24.45 - 24.65 GHz (multi-channel)

### Search While Track

Scan volume	User configurable with FOV
Scan update rate	~1 Hz for 120° (azimuth) x 20° (elevation) volume
Track acquisition rate	New tracks acquired in < 1 second
Search While Track	Tracks updated up to 10 Hz while radar intelligently scans rest of FOV
Max tracks	Up to 20 simultaneous tracks
Modes	Operational modes enable quick simple tracking of humans and UAVs

### SWaP and Environmental

Size	20.3 cm x 16.3 cm x 4 cm
Weight	1.25 kg
Power	DC +15 V to +28 V
Operating	<50 W
Hot standby	<15 W
Operating temp	-40°C to +75°C
Weather Protection	IP67

### Integration and Data

Control I/O	Gigabit Ethernet
Power I/O	Snap lock 12 pin connector
Data Outputs	RVMaps (40 MB/s) Detections (1 MB/s) Tracks (13 kB/s)
Mounting	VESA 75 & 100 mm; AMPS

### Ordering Information

Model number	700-0005-203_SSR
--------------	------------------

### FCC Identifier

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