

EchoShield[®]

Multi-Mission 4D Radar

Intelligent Search.
Best-in-class Performance.
Next-gen ESA.

Advanced pulse-Doppler cognitive radar.

Ultra-precise ESA beamforming combined with dynamic waveform synthesis to deliver half-degree tracking accuracy.

Micro-Doppler-based object screening enables long-range trustworthy classification.

Powerful cognitive control software allocates radar resources *when* and *where* most effective.

Leverages data from onboard (DTED, street maps, other) and offboard (customer-defined) knowledge repositories.

Full-featured software development kit enables data-rich C2 integration.

Low cost, size, weight, and power (C-SWaP).



Vehicle
>11 km



Human
>8 km



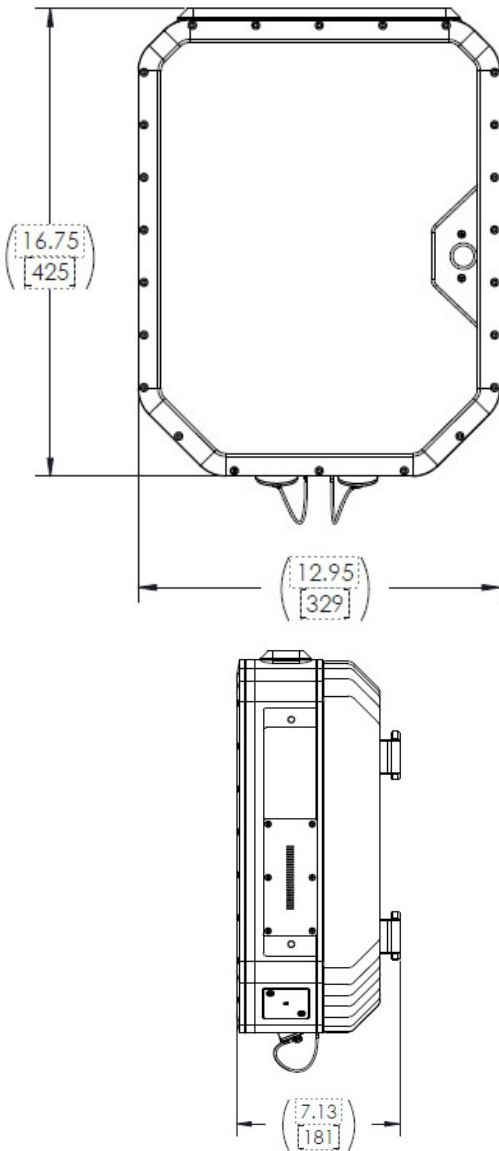
Matrice 600
>6 km



Phantom 4
>3 km

EchoShield

Multi-Mission Cognitive 4D Radar



Performance

Instrumented Range	20 km (mission defined)
Field of View	130° azimuth x 90° elevation
Track Accuracy	<0.5° azimuth x <0.5° elevation
Frequency (Ku-band / multi-channel)	15.4 - 15.7 GHz Band 1 (RadioNavigation) 15.7 - 16.6 GHz Band 2 (RadioLocation)

Counter-UAS Mission Profile

Scan Volume	User configurable
UAS mean tracking ranges	
Group 1 (-20 to -10 dBsm)	2.7 km to 4.8 km
Group 2 (-10 to -5 dBsm)	4.8 km to 6.4 km
Group 3 (-5 to 5 dBsm)	6.4 km to 11.4 km
Maximum Active Tracks	
High priority objects	>40
Low priority objects	>1,000

SWaP and Environmental

Size	42.5 cm x 33 cm x 18 cm
Weight	17.8 kg
Power	DC +20 V to +48 V
Operating	<250 W (Max duty cycle) MIL-STD-1275 compatible
Operating Temp	-40° C to +65° C
Environmental	MIL-STD-810 H
Ingress	IP66

Integration and Data

Control I/O	Gigabit Ethernet
Power I/O	MIL-STD_38999 Style Bayonet
Data output ports:	
10 Gbps Ethernet	Range-Doppler spectrograms
1 Gbps Ethernet	Detections
	Measurements
	Tracks
	RadarStatus
Mounting	4x M6 200 mm bolt pattern

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.

Ordering Information

TAN 686A CAMO

700025-200-200