

X-band Short-range Monopolar Radar Solid-state Coherent Pulse Doppler System With Al Machine Learning For All-weather Low Small Slow Target Detection Ultra-low False Alarms Expandable 2Dphase Scanning

Basic Information

Place of Origin: ChinaBrand Name: MYT

Certification: CNAS、CMA、CAL、ILAC-MRA

Model Number: DD-R34Minimum Order Quantity: 1

• Price: Pricing is negotiable based on order quantity

Delivery Time: 10 work daysPayment Terms: L/C,T/T

Supply Ability: 1000units per month



Product Specification

. TAS Tracking Target Count:≥6

• Minimum Detection Altitude:≤10m

• Velocity Range: 1m/s~100m/s

• Resolution Ratio: Distance: ≤15m, Azimuth: ≤12°, Elevation:

≤12°

• Operating Temperature -40 +60

Range:

• Size: ≤2 65mm* 205mm*1 50 Mm

Power Dissipation: ≤150W

Supply Electricity: AC220V/DC24V

Levels Of Protection: IP66

Joggle: RJ45 Network Port Highlight: X-band anti UAV radar,

solid-state coherent pulse Doppler radar,

Al machine learning radar system

The DD-R34 X-band short-range monopolar rada

1, Product Overview

The DD-R34 X-band short-range monopolar radar employs a fully solid-state, fully coherent, and pulse Doppler system, enabling all-weather detection and early warning of "low, small, slow" targets. Utilizing machine learning and AI recognition technologies based on "micro-Doppler signatures" and "flight path features," it achieves effective detection and classification of targets including drones, light aircraft, helicopters, powered triplanes, airships, and airborne balloons with extremely low false alarm rates. The radar features a two-dimensional phase scanning system that can be expanded into configurations such as "azimuth mechanical scanning + elevation phase scanning" or multi-polar arrays, meeting diverse application requirements.

2. Function

- 1) It can realize the target positioning, trajectory display and playback function on the map, and can display the target distance, azimuth, pitch and speed information;
- 2) Records and saves target track data and radar status data, and supports data playback and query;
- 3) The AI recognition technology adopts "micro Doppler features" and "track features", which has the ability to classify and identify targets, such as drones, birds, people and cars.
- 4) Using machine learning technology, adaptive environment, no need to adjust parameters, can be started directly to work;
- 5) It has cloud and rain noise suppression function, which can work all day long;
- 6) The software can configure the pitch coverage, target update rate and range range;
- 7) It has the function of automatic compensation for independent positioning and orientation, pitch and roll angle;
- 8) It has real-time working status monitoring.

3, qualification

order number	parameter	metric
1	frequency range	X frequency range
2	detection range	≥ 1.5Km(RCS:0.01m ² , unmanned aerial vehicle)
3	fade zone	≤ 80 m
4	work pattern	2D Phased Array
5	hunting zone	Heading: ±45°, Pitch: 0°~ 80° (configurable according to mission requirements)
6	trace function	TAS feature available
7	TAS tracking target count	≥6
8	Minimum detection altitude	≤ 10m
9	velocity range	1m/s~100m/s
10	Target update rate	TWS: ≤ 3s (60° pitch coverage) TAS: ≤ 0.5s (default)
11	resolution ratio	Distance: ≤15m, azimuth: ≤12°, elevation: ≤12°
12	Search precision (RMS)	Distance: ≤10m, azimuth: ≤ 1°, elevation: ≤ 1°
13	Tracking accuracy (RMS)	Distance: ≤10m, azimuth: ≤ 0.8°, pitch: ≤ 0.8°
14	joggle	RJ45 network port
15	target capacity	≥500 batches
16	weight	≤ 7Kg (net weight of the device, excluding power supply/cable)
17	supply electricity	AC220V/DC24V
18	power dissipation	≤ 150W
19	size	≤2 65mm* 205mm*150mm
20	operating temperature range	-40 +60
21	levels of protection	IP66

4, Application Scenarios



5, Certification Certificate



6, Company profile

Chongqing Miao Yitang Technology Co., Ltd. is a specialized company engaged in anti-drone and unmanned intelligent defense management. With the technical support from the AI Internet of Things Research Institute of the Chinese Academy of Sciences and collaborations with multiple intelligent AI companies, the company has established research laboratories for AI unmanned field products, accumulating a variety of technical patents.

The company's products are widely applied to unmanned automatic management solutions for various defense and perimeter areas, including Al anti-drone systems and Al unmanned vehicle patrol systems. These systems integrate with multiple technologies such as optoelectronics, radar, vibration, thermal imaging, facial recognition, and radio frequency management, truly achieving a 24-hour uninterrupted anti-drone defense and ground perimeter defense warning system. This allows for cost savings for clients, reduction in human resource allocation, and

ensures the safety of clients' lives and property. The outstanding security system has won the company an excellent reputation and created higher value for its partners.





7, Customer Service

- 1). We offer 24 hours service after sales
- 2). If there are any usage or quality issues with the product, we provide online technical support to diagnose the cause of the problem.

 3). Should you find the products unsatisfactory, kindly return it to us within a period of 3 months from the date of dispatch. Upon receipt and inspection, should the products be found to be free from any damage attributable to human factors, a full refund will be granted. Alternatively, we can engage in discussions to amend the product and subsequently reship the product to you.





Chongqing Miao Yi Tang Technology Co., Ltd.



+8613101235550



gary@chinaantidrone.com



chinaantidrone.com