

X band 8km Anti Drone System for Low Altitude Target Monitoring and Recognition with Minimal False Alarms low-altitude surveillance radar

Our Product Introduction

Basic Information

- Place of Origin: China
- Brand Name: MYT
- Certification: CNAS、CMA、CAL、ILAC-MRA
- Model Number: DD-R8
- Minimum Order Quantity: 1
- Price: Pricing is negotiable based on order quantity
- Delivery Time: 10 work days
- Payment Terms: TT, LC
- Supply Ability: 1000units per month



Product Specification

- Detection Distance: $\geq 8\text{km}$ (RCS=0.01 M²)
- Antenna Rotation Speed: 60rpm (1 S) (upgradable)
- Max Tracked Targets: ≥ 300
- Tracing Velocity: 1m/s 150m/s
- Highlight: **8km Anti Drone System, Recognition Anti Drone System**



More Images



Product Description

DD-R8 low-altitude surveillance radar

1, Product Introduction

The DD-R8 series low-altitude surveillance radar is a special radar system for monitoring low-altitude targets. It can effectively detect and track low-flying aircraft, unmanned aerial vehicles, birds, cruise missiles and other targets, while taking into account ground and surface targets. The radar integrates digital beamforming (DBF) technology, with low equivalent isotropic radiated power, high measurement accuracy, strong multi-target processing, excellent anti-interference ability, and stable operation in complex environments. It has a wide range of applications, which can provide important support for air traffic control, key site protection, low-altitude economy, airport bird exploration, battlefield 'anti-none', border and coastal defense, etc., and can provide a solid guarantee for low-altitude safety and order.



2, Product characteristics

1). Extensive Coverage with Cost Efficiency

Utilizing 360° azimuth mechanical scanning and elevation Digital Beamforming (DBF), this system delivers wide-area surveillance (up to 64° pitch) without compromising affordability.

2). High Refresh Rate for Superior Maneuvering Target Detection

DBF technology boosts the data refresh rate to 1s/2s/3s (vs. traditional low-altitude radar's 6s), enabling real-time tracking of high-speed targets up to 150m/s.

3). High Detection Accuracy with Minimal False Alarms

Advanced adaptive clutter suppression significantly reduces false alarms while effectively mitigating ground, sea, and weather clutter—expanding usable scenarios.

4). Lightweight & User-Friendly Design

As a continuous wave radar, it eliminates bulky high-power pulse circuits, reducing size, weight, and power consumption. Features include: Single-person portability

Intuitive human-machine interface for low learning curves

5). Near-Zero Blind Zone & Multi-Target Tracking

Unlike pulsed radar, its uninterrupted signal transmission avoids blind zones, enabling:

Real-time monitoring of birds/drones near runways

Simultaneous tracking of 300+ targets with high-precision positioning

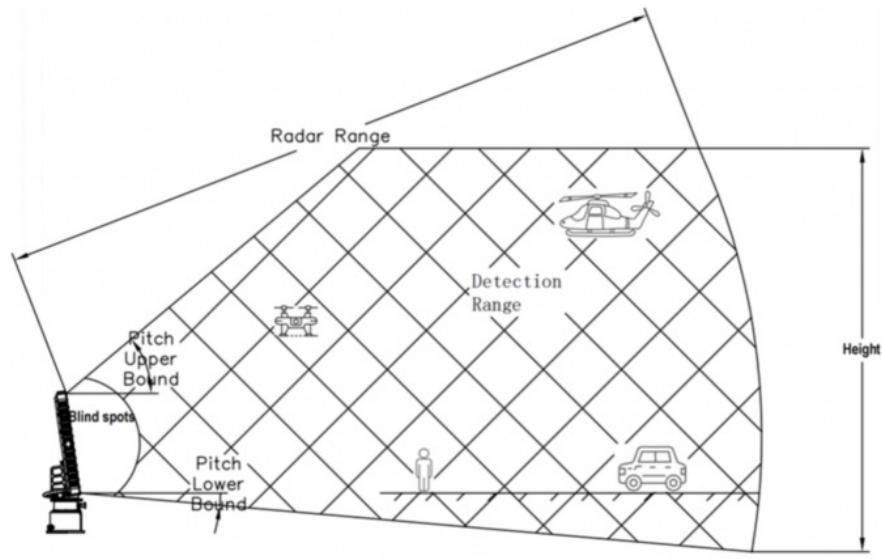
6). Low Probability of Intercept (LPI)

Continuous wave operation ensures:

Low transmission power

Uniform spectral distribution (no pulse spikes)
 High stealth against enemy interceptors
 7). Precision Tracking Capabilities
 With a 1Hz spatial scan rate and advanced algorithms, it delivers real-time, stable tracking of agile targets.
 8). Seamless System Integration
 Equipped with open data interfaces and modular design for easy integration into multi-sensor C-UAS (Counter-UAS) networks.

3, Product Specifications



Radar overlay slices

No	Items		Index	
Qualification				
1	Operating frequency band		X	
2	Space Coverage	Pitch	-4° 60°	
		Azimuth	360°	
		Range	15km	
		Blind spots	50m	
		Height	2000m	
3	Detection distance	Small rotary-wing UAVs (RCS=0.01 m²)	≥8km	
		Medium-sized fixed-wing UAVs (RCS=1 m²)	≥15km	
		Personnel	≥14km	
		Helicopters/vehicles	≥15km	
4	Measure Accuracy	Distance	≤5m(RMS)	
		Azimuth	≤0.4°(RMS)	
		Pitch	≤0.4°(RMS)	
5	Antenna Rotation Speed		20rpm(3s)	
			30rpm(2s)	
			60rpm (1 s) (upgradable)	
6	Max Tracked Targets		≥300	
7	Tracing Velocity scope		1m/s 150m/s	
Power & Interfaces				
1	Power Supply		DC 36~52V(with AC220V-DC48V adapter)	
2	Communication		Gigabit Ethernet aviation plug	
3	Power Dissipation		≤330W	
environmental suitability				
1	Operating Temperature		-40 +55	
2	Humidity		≠90%	
3	Protection Level		IP66 (host: IP67)	
Weight & Size				
1	weight (kg)	monomer	Host	16
			rotating platform	13.5
			tripod	12
		packing	Host	26
			rotating platform	26 (with accessories)
			tripod	15
2	size	monomer	Host	675*540*85
			rotating platform	400*228*216
			tripod	940*230*230
		Host	750*630*170	

	(mm)	packing	rotating platform	500*480*400
			tripod	1140*290*290

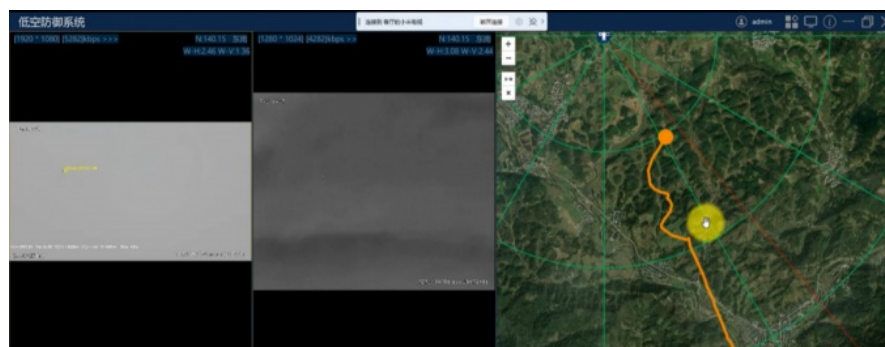
4, Typical application



Rotorcraft UAV detection and tracking



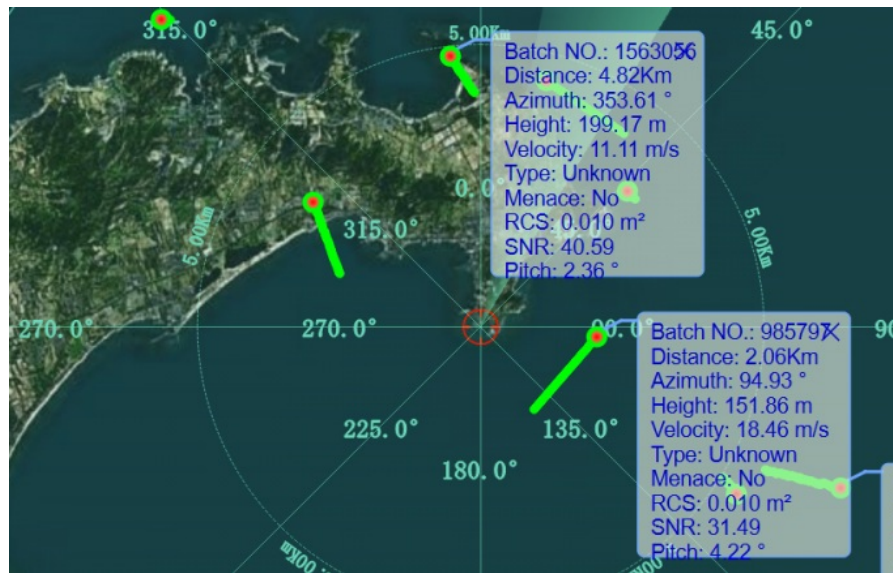
Helicopter detection and tracking



Raylink (visible light/infrared/radar)



Foreign trade vehicle anti-missile project



Bird-spotting app



Birds are spotted at the airport

5, Certification Certificate



8, 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 AI anti-drone systems and AI 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.



6, 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.

CUSTOMER SERVICE

- * Fast and patient communication: professional sales reply immediately
- * Fast delivery: usually 2-7 days
- * Flexible Safe shipping: fast by air or sea with cheap freight
- * Customer-friendly: complete user manual and exact video training provided
- * After sales service: one year warranty and life time technical support



Chongqing Miao Yi Tang Technology Co., Ltd.



+8613101235550



gary@chinaantidrone.com



chinaantidrone.com

www.chinaantidrone.com