X Band 5km Low-Altitude Surveillance Radar Wide Coverage Strong Multi-Target Processing For Low-Altitude Monitoring

Our Product Introduction

Basic Information

- Place of Origin: China
- Brand Name: MYT
- Certification: CNAS、CMA、CAL、ILAC-MRA
- Model Number: DD-R5
- 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 Small Rotary-wing UAVs: ≥5km
- Detection Distance Medium-sized Fixed-wing UAVs: ≥10km
- Detection Distance Personnel: ≥8km
- Detection Distance Helicopters/vehicles: ≥10km
- Highlight: **5km Low Altitude Surveillance Radar**, **X band Low Altitude Surveillance Radar**

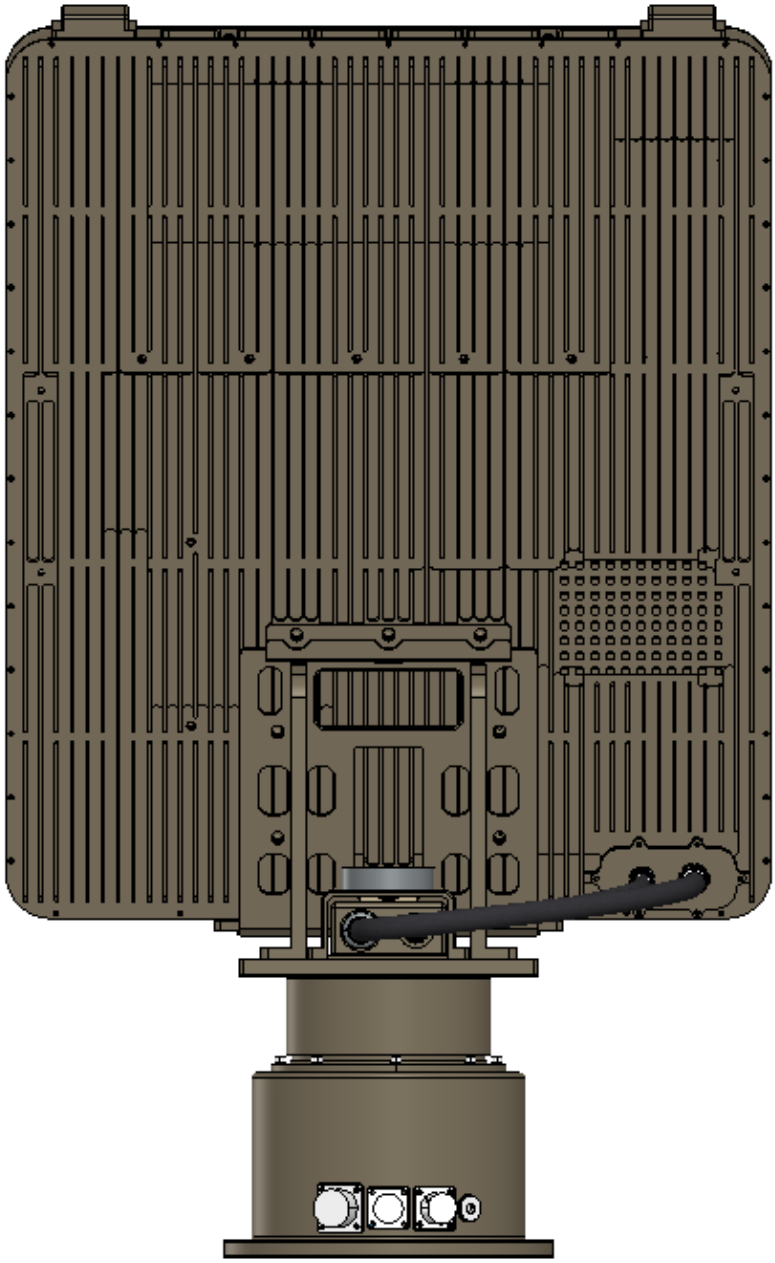
More Images

Product Description

DD-R5 low-altitude surveillance radar

1, Introduction

The DD-R5 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) Large coverage, great value for the price

Azimuth mechanical scanning and elevation digital beamforming (DBF) technology are used to achieve a wide range of coverage under the premise of taking into account economy: azimuth 360°, pitch up to 45°.

2) The data refresh rate is high, and the maneuvering target detection ability is strong

Using DBF technology, the general 6s refresh rate of traditional low-altitude radar is increased to 1s/2s/3s, which can effectively track maneuvering targets, and the tracking target speed is increased to 150m/s.

3) The detection probability is high and the false alarm probability is low

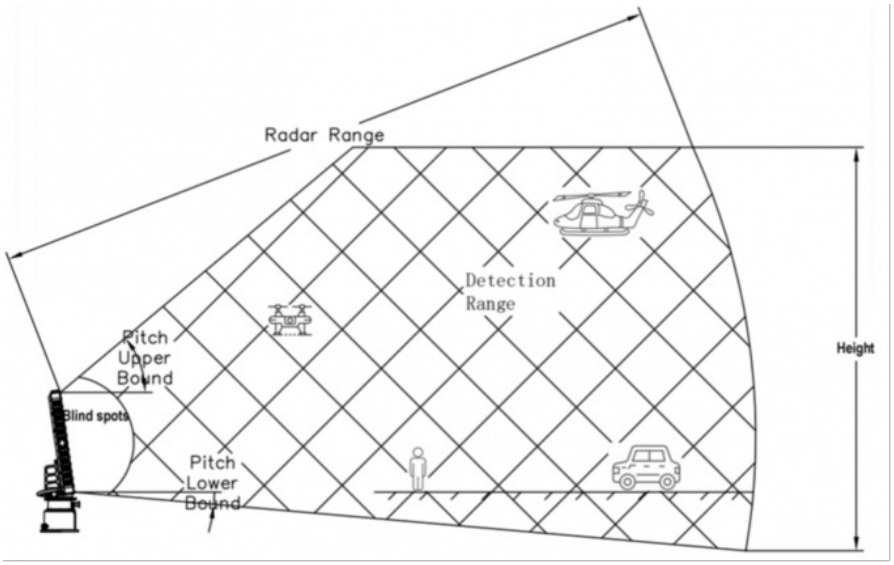
With adaptive clutter suppression technology, the false alarm rate is greatly reduced, and ground clutter, sea clutter and meteorological clutter are effectively suppressed, which greatly expands the radar application scenarios.

4) Portable and easy to operate

Compared with pulsed radar, the continuous wave system has a low transmission power, and there is no need for a high-power pulse transmission circuit, which greatly reduces the power consumption and reduces the size and weight of the equipment. It can be carried and set up by a single person, which is convenient for users to use; At the same time, the human-machine interface is intuitive and concise, and the

configuration is simple, which effectively reduces the user's learning and use cost of radar.
5) Small near-distance blind zone and can detect many targets simultaneously
The continuous wave radar transmits uninterrupted signals, and there is no problem of large short-range blind spots of pulsed radar. In the vicinity of the airport, real-time and continuous monitoring of birds and small UAVs close to the runway can be realized, and the dynamic changes of the target can be accurately captured. It can automatically track more than 200 batches of targets at the same time and output high-precision position information.
6) Low interception rate
Compared with pulsed radar, continuous wave radar continuously transmits signals, has low transmission power, uniform spectrum distribution, and no obvious pulse spikes like pulsed radar, and is not easy to be identified by enemy interceptors in a complex electromagnetic environment, and the signal is highly concealed
7) Good Tracking Performance
The radar supports a maximum space scan rate of up to 1Hz, and uses advanced tracking algorithms to realize real-time tracking of various strong maneuvering targets, providing users with accurate and intuitive target information.
8) Good System Expandability and Integration
The friendly data interface and user interface can be integrated with other sensing devices very easily to form a 'Anti-drone' system.

3, Product Specifications



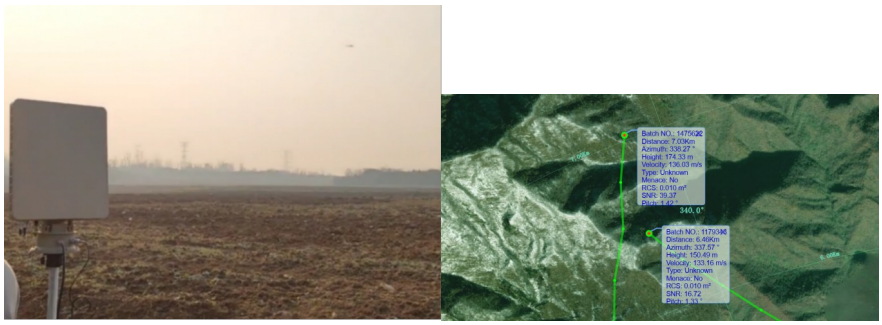
Radar overlay slices

No.	Items			Index
Qualification				
1	Operating frequency band			X
2	Space Coverage		Pitch	-5° 40°
			Azimuth	360°
			Range	10km
			Blind spots	50m
			Height	1000m
3	Detection distance		Small rotary-wing UAVs (RCS=0.01 m²)	≥5km
			Medium-sized fixed-wing UAVs (RCS=1 m²)	≥10km
			Personnel	≥8km
			Helicopters/vehicles	≥10km
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			≥200
7	Tracing Velocity scope			1m/s 150m/s
Power & Interfaces				
1	Power Supply			DC36~52V (with AC220V-DC48V adapter)
2	Communication			Gigabit Ethernet aviation plug
3	Power Dissipation			≤220W
Environmental Suitability				
1	Operating Temperature			-40 +55
2	Humidity			≯90%
3	Protection Level			IP66 (host: IP67)
Weight & Size				
1	weight (kg)	monomer	Host	14
			rotating platform	13.5
			tripod	12

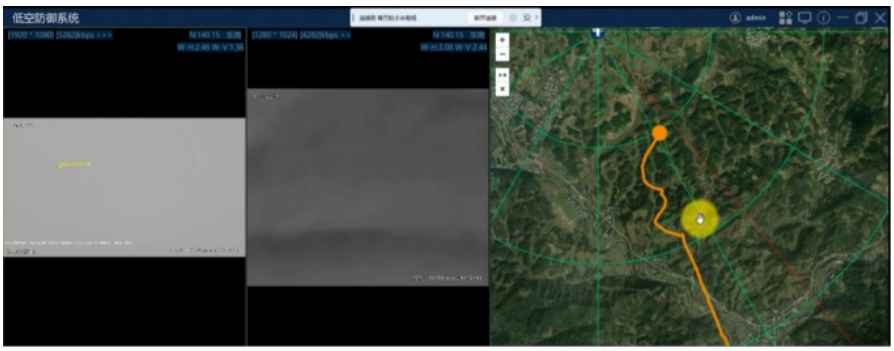
		packing	Host	23
			rotating platform	26(with accessories)
			tripod	15
2	size (mm)	monomer	Host	595*500*85
			rotating platform	400*228*216
			tripod	940*230*230
		packing	Host	590*700*170
			rotating platform	500*480*400
			tripod	1140*290*290

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.

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