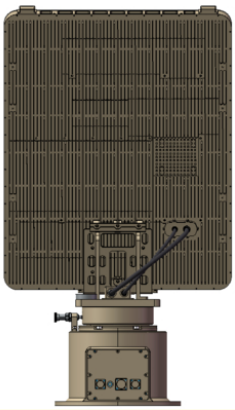
X Band 10km Anti Drone System Low-Altitude Surveillance Radar With Anti Drone System For Effective Detection And Tracking Of Low-Flying Targets

Our Product Introduction

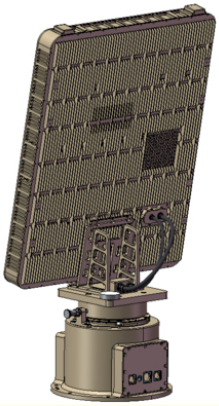
Basic Information

- Place of Origin: China
- Brand Name: MYT
- Certification: CNAS、CMA、CAL、ILAC-MRA
- Model Number: DD-R10
- Minimum Order Quantity: 1
- Price: Pricing is negotiable based on order quantity
- Delivery Time: 10 work days
- Payment Terms: TT, LC
- Supply Ability: 50 units per month



Product Specification

- Detection Distance: ≥10km (RCS=0.01 M²)
- Operating Temperature: -40 +55
- Protection Level: IP66 (host: IP67)
- Power Dissipation: ≤400W
- Highlight: **X band Anti Drone System**, **Low-Altitude Surveillance Radar**, **10km X band Anti Drone System**



More Images

Product Description

DD-R10 low-altitude surveillance radar

1, Product Introduction

The DD-R10 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 +65°.

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 500 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

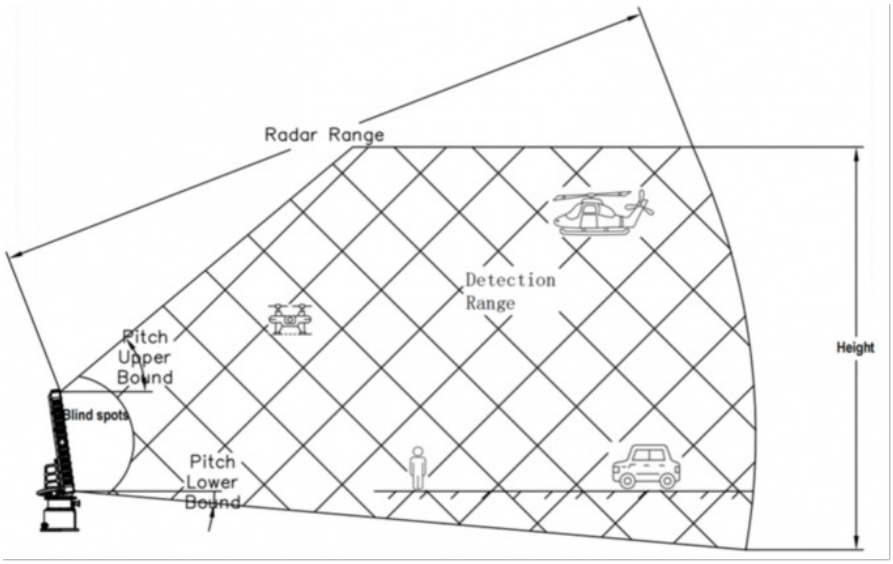
7) Good Tracking Performance

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



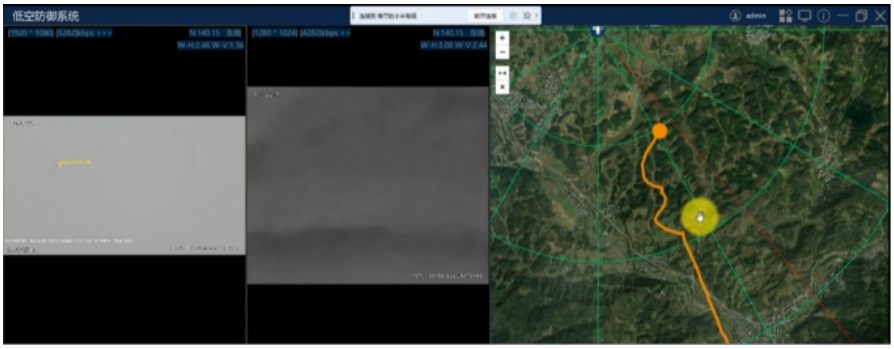
Radar overlay slices

No.	Items			Index
Qualification				
1	Operating frequency band			X
2	Space Coverage		Pitch	-5° 60°
			Azimuth	360°
			Range	20km
			Blind spots	50m
			Height	3000m
3	Detection distance		Small rotary-wing UAVs (RCS=0.01 m²)	≥10km
			Medium-sized fixed-wing UAVs (RCS=1 m²)	≥20km
			Personnel	≥15km
			Helicopters/vehicles	≥20km
4	Measure Accuracy		Distance	≤5m(RMS)
			Azimuth	≤0.3°(RMS)
			Pitch	≤0.3°(RMS)
5	Antenna Rotation Speed			20rpm(3s)
				30rpm(2s)
				60rpm (1 s) (upgradable)
6	Max Tracked Targets			≥500
7	Tracing Velocity			1m/s 150m/s
Power & Interfaces				
1	Power Supply			DC36~52V (with AC220V-DC48V adapter)
2	Communication			Gigabit Ethernet aviation plug
3	Power Dissipation			≤400W
Environmental Suitability				
1	Operating Temperature			-40 +55
2	Humidity			≯90%
3	Protection Level			IP66 (host: IP67)
Weight & Size				
1	weight (kg)	monomer	Host	25
			rotating platform	27
			tripod	20
		packing	Host	45
			rotating platform	50 (with accessories)
			tripod	23
2	size (mm)	monomer	Host	815*650*93
			rotating platform	600*500*450
			tripod	1100*450*450
		packing	Host	970*780*250
			rotating platform	600*520*470
			tripod	1100*450*450

4, Typical application

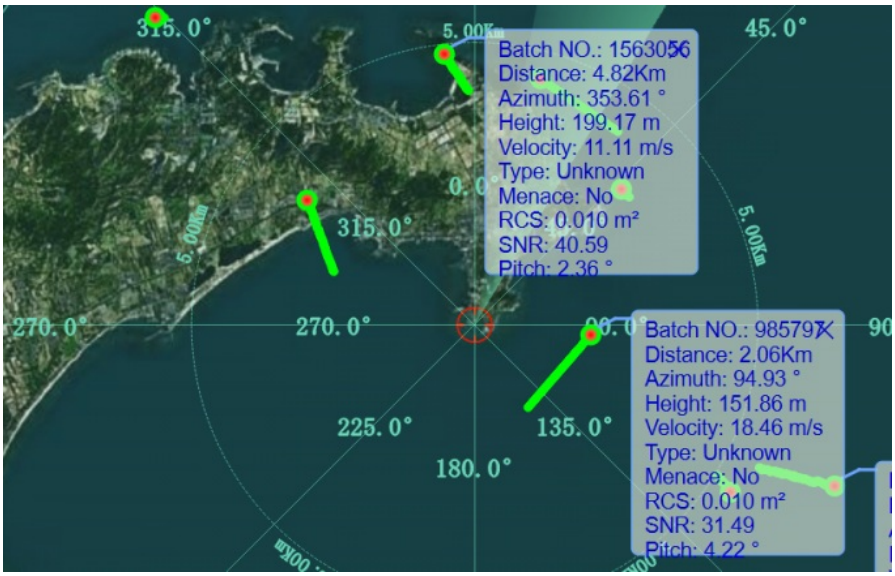
Rotorcraft UAV detection and tracking

Helicopter detection and tracking



Raylink (visible light/infrared/radar)

Foreign trade vehicle anti-missile project



Bird-spotting app

Birds are spotted at the airport

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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