

Anti UAV Radar for All-Weather Detection and Early Warning DD-R28 Medium-Range X-Band Four-Element Array Radar

Basic Information

Place of Origin: ChinaBrand Name: MYT

Certification: CNAS、CMA、CAL、ILAC-MRA

Model Number: DD-R28

Minimum Order Quantity:

• 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:≥24

• Minimum Detection Altitude:≤10m

Velocity Range: 1m/s~100m/s

Resolution Ratio: Distance: ≤15m, Azimuth: ≤6°, Elevation: ≤6°

• Operating Temperature -40 +60

Range:

• Size: ≤ 950mm* 950mm*450 Mm

• Power Dissipation: ≤ 1400W

Supply Electricity: AC220V/DC24V

• Levels Of Protection: IP66

• Joggle: RJ45 Network Port

• Highlight: Anti UAV radar all-weather detection,

Medium-range X-band radar, Four-element array UAV radar

The DD-R28 medium-range X-band four-element array radar

1, Product Overview

The DD - R28 medium - range X - band four - element array radar is a sophisticated piece of equipment that seamlessly integrates a fully solid - state, fully coherent, and pulse Doppler system. This integration endows the radar with remarkable capabilities. It allows for all - weather detection and early warning specifically focused on "low, small, slow" targets. These types of targets can be particularly challenging to detect due to their characteristics, but the radar's design overcomes these difficulties.

One of the key features of this radar system lies in its utilization of advanced technologies such as machine learning and AI recognition. By basing these on "micro - Doppler signatures" and "flight path features," the system is able to achieve an ultra - low false alarm rate. This is crucial in real - world applications as false alarms can lead to unnecessary responses and wasted resources.

Simultaneously, the DD - R28 radar is highly effective at detecting and classifying a broad spectrum of targets. This includes drones, which have become increasingly prevalent in various scenarios, light aircraft that may operate in lower - altitude airspace, helicopters with their unique flight characteristics, powered triplanes that combine features of traditional aircraft and lighter - than - air craft, airships that move relatively slowly, and airborne balloons. All these different types of targets can be accurately detected and classified by the radar, making it a versatile and reliable asset for surveillance and early warning purposes.

2, Function

The product is equipped with comprehensive target monitoring and analysis capabilities. It enables target positioning, trajectory display, and playback functions on the map. Meanwhile, it presents key parameters such as target distance, azimuth, elevation, and speed in real time. The system has built-in data recording and storage functionality, which can comprehensively save target trajectory data and radar status information, thereby facilitating subsequent data playback and query operations.

Leveraging AI recognition technology based on "micro-Doppler features" and "track features," the product demonstrates powerful target classification and identification capabilities. It can accurately identify various target types, including drones, birds, people, and vehicles. The system integrates advanced machine learning technology, enabling it to autonomously adapt to the current environment and commence operation directly without the need for manual parameter adjustment.

To ensure reliable all-weather operation, the product is equipped with cloud and rain noise suppression capabilities, effectively eliminating interference under adverse weather conditions. The software interface offers flexible parameter configuration options, enabling users to adjust settings such as elevation coverage, target update rate, and monitoring range according to their requirements. Moreover, the product features automatic compensation functions for independent positioning, orientation, elevation, and roll angles, ensuring measurement accuracy. During system operation, users can fully monitor the equipment's working conditions through the real-time status monitoring functionality, ensuring the stable and efficient operation of the system.

3, qualification

order number	parameter	metric
1	frequency range	X frequency range
2	detection range	≥ 8Km(RCS:0.01m2, unmanned aerial vehicle) ≥ 15Km(RCS:0.3 m2, unmanned aerial vehicle)
3	fade zone	≤ 150m
4	work pattern	2D Phased Array
5	hunting zone	Azimuth: 0°~360°, elevation: 0°~80° (configure according to task requirements)
6	trace function	TAS feature available
7	TAS tracking target count	≥ 24
8	Minimum detection altitude	≤ 10m
9	velocity range	1m/s~100m/s
10	Target update rate	TWS: ≤ 3.6 seconds (30° pitch coverage, 10km range) TAS: ≤ 0.5s (default)
11	resolution ratio	Distance: ≤15m, azimuth: ≤6°, elevation: ≤6°
12	Search precision (RMS)	Distance: ≤10m, azimuth: ≤0.5°, elevation: ≤0.5°
13	Tracking accuracy (RMS)	Distance: ≤10m, azimuth: ≤0.4°, elevation: ≤0.4°
14	joggle	RJ45 network port
15	target capacity	≥500 batches
16	weight	≤ 90Kg (net equipment weight, excluding power supply/cable)
17	supply electricity	AC220V/DC24V
18	power dissipation	≤ 2500W
19	size	≤ 950mm* 950mm*450 mm

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 Al companies, the company has established research laboratories for Al unmanned field products, accumulating a variety of

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.





Chongging Miao Yi Tang Technology Co., Ltd.





