

# Advanced Anti UAV Radar The Medium-Range X-Band Four-Element Array for Ultra-Low False Alarm Rates

## **Basic Information**

Place of Origin: ChinaBrand Name: MYT

Certification: CNAS、CMA、CAL、ILAC-MRA

Model Number: DD-R28

• Minimum 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:≥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: medium-range anti UAV radar,

X-band four-element array radar, ultra-low false alarm 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 incorporates a fully solid-state, fully coherent, and pulse Doppler system. This empowers it to perform all-weather detection and early warning of "low, small, slow" targets. By leveraging machine learning and AI recognition technologies founded on "micro-Doppler signatures" and "flight path features," the system achieves ultra-low false alarm rates. Concurrently, it effectively detects and classifies a diverse range of targets, such as drones, light aircraft, helicopters, powered triplanes, airships, and airborne balloons.

#### 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, and simultaneously presents key parameters such as target distance, azimuth, elevation, and speed in real time. The system incorporates built-in data recording and storage functionality, which can completely save target trajectory data and radar status information, thereby supporting 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, accurately identifying 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 guarantee 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
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## 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.





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