

# Unmatched Anti UAV Detection And Protection With The Medium-Range X-Band Four-Element Array Radar And Al Recognition

# **Basic Information**

Place of Origin: ChinaBrand Name: MYT

Certification: CNAS、CMA、CAL、ILAC-MRA

Model Number: DD-R27

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 +70

Range:

• Size: ≤ 950mm\* 950mm\*450mm

• Power Dissipation: ≤ 1400W

• Supply Electricity: AC220V/DC24V

• Levels Of Protection: IP66

• Joggle: RJ45 Network Port

• Highlight: Anti UAV radar with Al recognition,

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

# The DD-R27 medium-range X-band four-element array radar

#### 1, Product Overview

The DD-R27 medium-range X-band four-element array radar is outfitted with a fully solid-state, fully coherent, and pulse Doppler system. This setup enables it to conduct all-weather detection and early warning of "low, small, slow" targets. Through the utilization of machine learning and AI recognition technologies based on "micro-Doppler signatures" and "flight path features," the system attains ultra-low false alarm rates. Simultaneously, it can effectively detect and categorize a wide variety of targets, including 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. Simultaneously, it presents key parameters in real time, including target distance, azimuth, elevation, and speed. The system features 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.

Utilizing 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, such as drones, birds, people, and vehicles. The system integrates advanced machine learning technology, enabling it to autonomously adapt to the current environment and initiate 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. Additionally, the product incorporates 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 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	≥ 5Km(RCS:0.01m <sup>2</sup> , unmanned aerial vehicle ) ≥ 10Km(RCS:0.3 m <sup>2</sup> , unmanned aerial vehicle )
3	fade zone	≤150m
4	work pattern	2D Phased Array
5	hunting zone	Azimuth: 0°~360°, elevation: 0°~60° (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: ≤ 3s (30° pitch coverage, 7.5km 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	≤ 80Kg (net equipment weight, excluding power supply/cable)
17	supply electricity	AC220V/DC24V
18	power dissipation	≤1400W
19	size	≤ 950mm* 950mm*4 50mm
20	operating temperature range	-40 + 70
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 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.





Chongqing Miao Yi Tang Technology Co., Ltd.



+8613101235550



gary@chinaantidrone.com



chinaantidrone.com