

# Medium-range X-band Phased Array Anti UAV Radar With Cloud And Rain Noise Suppression

# **Basic Information**

Place of Origin: ChinaBrand Name: MYT

Certification: CNAS、CMA、CAL、ILAC-MRA

Model Number: DD-R32 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:≥6

• Minimum Detection Altitude:≤10m

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

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

≤12°

• Operating Temperature -40 +70

Range:

• Size: ≤ 432mm\*316mm\*2 10 Mm

• Power Dissipation: ≤200W

• Supply Electricity: AC220V/DC24V

• Levels Of Protection: IP66

• Joggle: RJ45 Network Port

• Highlight: X-band anti UAV radar, phased array UAV radar,

anti UAV radar rain suppression

# The DD-R32 medium-range X-band phased array radar

#### 1, Product Overview

The DD-R32 medium-range X-band phased array radar is configured with a fully solid-state, fully coherent, and pulse Doppler system. This configuration empowers it to perform all-weather detection and early warning of "low, small, slow" targets. Through the utilization of machine learning and Al-based trajectory feature recognition, the system achieves ultra-low false alarm rates. Moreover, it can effectively detect and classify various targets, such as drones, light aircraft, helicopters, powered triplanes, airships, and airborne balloons.

#### 2, Function

The product utilizes advanced machine learning technology. This enables it to adapt to battlefield environments and be directly deployed upon installation, without the requirement for parameter adjustment. The system features robust detection capabilities and an extremely low false alarm rate, effectively detecting the maneuvering flight of unmanned aerial vehicles. To ensure reliable all - weather operation, the product is equipped with cloud and rain noise suppression functionality, enabling continuous operation under diverse weather conditions.

Regarding scanning modes, the system provides two directional scanning methods: "one - dimensional mechanical scanning + one - dimensional phase scanning" and "two - dimensional phase scanning". It can achieve both 360° all - around spatial detection and precise monitoring of key areas. The two modes can be flexibly switched without the need for software modification. The product concurrently integrates mechanical scanning tracking and phase scanning TAS tracking functions to ensure continuous and stable target tracking.

Al recognition technology based on "track features" empowers the system to accurately classify and identify multiple target types, including drones, birds, personnel, and vehicles. The built - in automatic positioning and calibration module can automatically perform equipment leveling and north calibration functions, streamlining the operation process. Moreover, the system offers flexible setting functions for distance and elevation scanning ranges, enabling users to make personalized configurations according to actual requirements.

#### 3, qualification

numb er         parameter er         X frequency range           1         frequency range         ≥ 3Km(RCS:0.01m², unmanned aerial vehicle)           2         detection range         ≥ 3Km(RCS:0.01m², unmanned aerial vehicle)           3         fade zone         ≤100m           4         work pattern         Supports machine scanning and 2D phase scanning           5         hunting zone         Scan: Angle: 0°~360°, Pitch: 0°~80° (configure according to tast requirements)           5         Sweep: Azimuth: -45° to 45°, elevation: 0° to 80° (configure according to mission requirements)           6         trace function         Machine scanning tracking function / phase scanning TAS function           7         TAS tracking target count         ≥6           8         Minimum detection altitude         ≤10m           9         velocity range         1m/s~100m/s           10         Target update rate         Aircraft scanning ≤3.5 seconds per phase, ≤3 seconds total (30 pitch coverage, 5km range)           11         resolution ratio         Distance: ≤15m, azimuth: ≤6°, elevation: ≤12°           12         Search precision (RMS)         Distance: ≤10m, azimuth: ≤0.4°, elevation: ≤1°           13         Tracking accuracy (RMS)         Distance: ≤10m, azimuth: ≤0.4°, elevation: ≤0.6°           14         joggle         RJ45 net	order		
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2 detection range  ≥ 6Km(RCS:0.3 m², unmanned aerial vehicle)  3 fade zone  4 work pattern  Supports machine scanning and 2D phase scanning  5 hunting zone  Scan: Angle: 0°~360°, Pitch: 0°~80° (configure according to tasl requirements)  Sweep: Azimuth: -45° to 45°, elevation: 0° to 80° (configure according to mission requirements)  Machine scanning tracking function / phase scanning TAS function  7 TAS tracking  target count  8 Minimum  detection altitude  9 velocity range  10 Target update  rate  pitch coverage, 5km range)  11 resolution ratio  Distance: ≤15m, azimuth: ≤0.4°, elevation: ≤12°  12 Search precision  (RMS)  13 Tracking  accuracy (RMS)  14 joggle  RJ45 network port  15 target capacity  Search procision  weight  ≤22kg (front panel: ≤9kg, turntable: ≤12kg)  AC220V/DC24V  18 power dissipation  20 operating  temperature  range	- '	rrequericy range	
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20 operating -40 +70 temperature range	18	power dissipation	≤200W
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range	20	operating	-40 +70
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21 levels of IP66	21	levels of	IP66
protection		protection	

#### 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