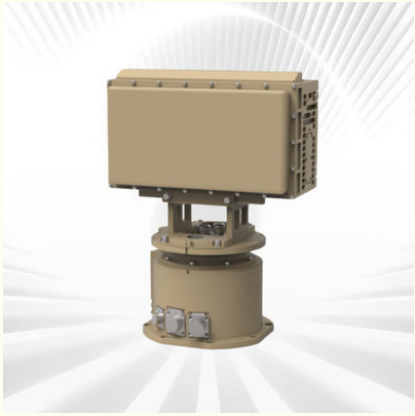
Medium-range X-band Phased Array Anti UAV Radar With Cloud And Rain Noise Suppression

Our Product Introduction

Basic Information

- Place of Origin: China
- Brand 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 days
- Payment 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 Range: -40 +70
- 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**

Product Description

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 AI-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.

AI 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

order number	parameter	metric
1	frequency range	X frequency range
2	detection range	≥ 3Km(RCS:0.01m^2, unmanned aerial vehicle) ≥ 6Km(RCS:0.3 m^2, 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 task requirements)
		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 network port
15	target capacity	≥500 batches
16	weight	≤22kg (front panel: ≤9kg, turntable: ≤12kg)
17	supply electricity	AC220V/DC24V
18	power dissipation	≤200W
19	size	≤ 432mm*316mm*2 10 mm
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 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.

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

www.chinaantidrone.com