



# High-end UAV Detecting and Jamming System

ND-BU002

The **ND-BU002** is the updated version based on ND-BU001 for UAV defense and critical area protection. Due to the advanced 3D active phased-array radar being adopted, its detection range has been extended dramatically. The system mainly consists of Detecting System, Jamming System and Camera System.

The Detecting System, which employs the advanced 3D active phased-array radar, can detect and track long-distance UAVs, both the UAV position in horizontal angle and in vertical angle. The Jamming System with quite high antenna and small output power jammer can use such high accurate information regarding the UAV position to get long enough jamming distance, and be jamming with the remote control signals and navigation signals of the UAV and force it landing or returning. The Camera System can efficiently record the tracks of the detected UAV for further close inspection, and also assist the Detecting System for more accurate monitoring.

## Main Features of Detecting System:

- Advanced 3D active phased-array radar
- Low false alarm rate and excellent ability in clutter suppression
- Multiple target capability: able to search at most 128 targets simultaneously
- Full-automatic searching and tracking, and supporting all day (24h) working
- Detection range  $\geq 6\text{km}$  (depending on circumstances and UAV type)
- Friendly man-machine interface

## Main Features of Jamming System:

- Directed jamming without violence
- 9 frequency bands of jamming signals (Frequency bands and output power can be customized)
- Supporting automatic/manual models switching
- Remote control frequency jamming: coverage of all available civil drones
- Directional high-gain antennas mounted on Pan-Tilt platform to follow the drone (track) and to transmit the jamming signal in the direction of the UAV (drone)

## Detecting System

Detection range	Max range (RCS=1m2)	16km
	Max range (RCS=0.1m2)	10km
	Max range (RCS=0.01m2)	6km
	Minimum range	0.25km
	Target speed	0.5-120m/S
	Target altitude	30-1000m
	Elevation angle	≥45°
	Azimuth angle	360°

## Jamming System

Output band	Frequency band	Channel output power	Total output power
9 Bands	430-440MHz	50W	266W
	459-461MHz	50W	
	868-870MHz	25W	
	902-928MHz	25W	
	GPS L1:1575.42±5MHz	25W	
	GPS L2:1227.6±5MHz	25W	
	GPS L3:1381.05±5MHz	25W	
	2400-2490MHz	25W	
	5725-5850MHz	16W	
Power supply	AC220V/50Hz		
Power consumption	800W		
Physical	Host weight	≤25Kg	
Environment	Protection	IP66	



## Camera System

### Thermal imaging Camera System

Array size/format	640 × 512
Starting time	8min (when normal temperature 25 degrees)
Electronic zoom	2x

### Visual camera System

Resolution	1920 × 1080
Pick-up device	200MP 1/1.8" CMOS low light bullet camera
Illumination	Color: 0.002Lux@(F1.2, AGC ON) Black/white: 0.002 Lux@(F1.2, AGC ON)
Lens	15.6-500mm (32x)

### Pan and tilt System

Horizontal angle of rotation	0-360° Continuous rotation
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## Deliverables

Radar Module	x 1
Jammer Module	x 1
Thermal Camera	x 1
Colour Camera	x 1
User Manual	x 1