C4i

communication

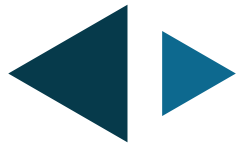### EXPERIENCE THE DIFFERENCE
YOUR SECURITY & SAFETY PRODUCTS

STATIC AND PORTABLE JAMMING SYSTEMS

CATALOG

C4i

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EXPERIENCE THE DIFFERENCE
YOUR SECURITY & SAFETY PRODUCTS

MANPACK C4I-RF UAV DETECTOR
C4I-WF-U-MPD

MANPACK C4I-RF UAV DETECTOR
C4I-WF-U-MPD

Wolvesfleet Manpack Type UAV Detector is versatile device.

it has been designed to offer highly efficient and accu rate detection for most DJI drones in the market.

Once receiving the drone and remote controller signals, based on the spectrum sensor and deep learning technology, the device can detect and identify the suspected drones information.

It can be easily to be carried personally, backpack, mounting on the vehicle or fixed or on roof of buil-ding as well as the field forces.

Advantages and Features

▸ Passive RF signals detection

▸ 300-6000Mhz full band wide band detection.

▸ It can be used accurately to detect DJI drones information. It detects and identifies the serial number, model number and frequency band, location, and trace of DJI drones, even the different drone models under the same brand.

▸ library can be expandable.

▸ white list function.

It can be also used to locate DJI drone remote controller's position.

▸ It supports multi targets' tracking and display their flight paths in different colors while multiple drones have been detected at the same time.

TECHNICAL SPECIFICATIONS

Frequency range	300-600Mhz Drone signals like 800Mhz, 1.4Ghz, 2.4Ghz, 5.8Ghz, 915Mhz, 5.2Ghz customized frequency as required
Radius Range Of Detection	Up To 3-5km (In Open Air)
Location Refresh Tima	2 Seconds
Locating Accuracy	Within 5m
Device Size	35mm X 215mm X 80mm
Coverage	360 Degree
Net Weight	Approx.6.5kg
Drone To Detect Simultaneously	30 Drones
Battery Lasting Time	Approx.8 Hours
Antenna Type	Omni Directional Antenna
Operationnal Temperature	-30°C~ 55°c
Protection class	IP 67

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EXPERIENCE THE DIFFERENCE
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VEHICLE CONVOY JAMMER SYSTEM MODEL
C4I-HC-VIPJ12

VEHICLE CONVOY JAMMER SYSTEM MODEL C4I-HC-VIPJ12

Protecting military and VIP convoys from the threat of Remote Control Improvised Explosive Devices (RCIEDs)–road-side bombs–has become a top priority in many parts of the world.
Preventing the organization of riots has like wise become critical in countries around the world.

The Vehicle Jamming Solution is a type of Bomb/RFJammer used for radio signal jamming.The solution adopts the most effective and reliable RF jamming technology and is equipped with a fully integrated broadband jamming system. With the powerful jamming system installed in the trunkand the antennas mounted on the roofthe of vehicle and the passengers will be effectively protected from RCIED threats.

The Vehicle Jamming Solution developed by us comes with tremendous advantages including soundly defeating lED threats efficient power distribution of internal RF jamming telemetry and optimal cooling system for challenging desert climates. Our jammer series adopt the cutting-edge jamming technique digital scrambler jamming technology which helps to save power and improve jamming efficiency.

TECHNICAL SPECIFICATIONS

VIPJ12

Channel	Output Port	Frequency range	Average out-putting power(±1dBm)
CH1	Radio Control Toys, phones & Alarms	20-100MHz	49dbm/80W
CH2	Walky-talky (VHF)UHF/RC315	100-400MHz	50dbm/100W
CH3	Walky-talky(UHF)	400-700MHz	50dbm/100W
CH4	CellularCDMA/GSM	870-960MHz	50dbm/100W
CH5	WirelessCameraGPSL2-5	1170-1390MHz	50dbm/100W
CH6	GPSL1/GLONASS/5G1500	1560-1620MHz	50dbm/100W
CH7	CellularDCS&PCS&UMTS/ WCDMA(3G)	1808-1990MHz	50dbm/100W
CH8	WLAN & Bluetooth & WiFi2.4G/ Cellular 4G LTE 2600 or 2300	2300-2500MHz	50dbm/100W
CH9	Cellular 5G3500/3700	3400-3800MHz	49dbm/80W
CH10	WIFI5.2G	5100-5500MHz	47dbm/50W
CH11	WIFI5.8G	5500-5580MHz	47dbm/50W
CH12	Cellular 4G LTE 2600	2500-2700MHz	49dbm/80W
Total power		1040W	
Jamming source		Digital Signal SourceTechnology	
Number of antenna		12	
Antenna type		Omni directional Antennas	
Power supply:		AC adapter 50 to 60Hz, (AC220V)	
Jammer Dimension		978X719X467mm (Not include antenna) N.W:65kg	
Package Size		1060X720X625mm	
Shielding radius		(100—500) meters Still depends on the signal strength in given area	
Antenna gain		2.5-10dbi	
Working temperature:		-30~60℃	
Operating Humidity		Up to 80%	
Housing Design		Rainproof design	

PRODUCT DESCRIPTION

This is high power DDS convoy jamming system, implementing the most effective and reliable RF jamming technology and equipped with a fully- integrated broadband jamming system, designed for the protection of VIP's and groups of people from radio controlled improvised explosion by disabling the radio exploder control lines in dangerous areas and for the prevention of leakage of information through intercepting units during confidential talks.

FEATURES

1: Output power total: 1040W, Designed with ultra broadband frequency bands, customize to 20MHz-6000MHz.

2: 12 modules plug and play design, facilitate for future power upgrading, change and maintenance. Any ruin on the modules never interfere the normal operating of other modules.

3: Each Band VSWR & Temperature over protection.

4: American Mil-spec standard case, shockproof and drop-resistance, available for the vehicle running in a worse field environment.

5: Up to 400 MHz frequency range each band. All Jamming Modules Designed by as , System operation can be performed in the driver's wired remote console unit directly to ON/OFF each module or change the output power and frequencies range , Continuously and simultaneously interference to the common used RF signals.

6: Device body is no more than 70kg.

7: Integrated smart active cooling system to make sure the device working continuously.

8: Equipped with flange spring omnidirectional antenna.

Optional up and down lifter

9: Optional: Integrated backup UPS battery system of about 100 minutes for continuous silent operation and fast start.

Optional: Equipped with high power generator to ensure excellent low noise operational capabilities.

Optional: Video camera with LCD monitor both inside and outside the vehicle provide rear viewing and monitoring

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PORTABLE GUN SIGNAL JAMMER
C4I-UAV

PORTABLE GUN SIGNAL JAMMER
C4I-UAV

This effective drone jammer gun can force the drone return home or land in a long range about 1000-2500 meter by interfering the remote control signal between the drone and ground.

PRODUCT FEATURE

1. High output power over 260W to jam the drone in a long range up to 1500 meter in real environment in 3 second

2. Multiple 8 channel 433MHz/900MHz/1.2G/1.4G/1.5G/2.4G/5.2G/5.8G

3. Single band controlled by the separate button

4. Light weight 6.15 kg and non slip holder design

5. Movable battery lasts over 80-90min

6. LCD screen to indicate the remain power capacity and voltage

7. Ultra thick heat sink and unique cooling structure design,to ensure its stability

8. IP55 waterproof, heat resistant, anti-shock, anti-broken

HOW TO USE

1. Please check the LCD screen to ensure the jammer is fully charged
2. Choose the frequency band to jam, and press the button
3. Target the drone gun at the flying drone in sky
4. Drone will be forced to return home or land immediately
* Pressing the choosen buttons as below sheet to act its jamming function

> Usually below channels pressed, the jammer can counter > 95% drones in the market.
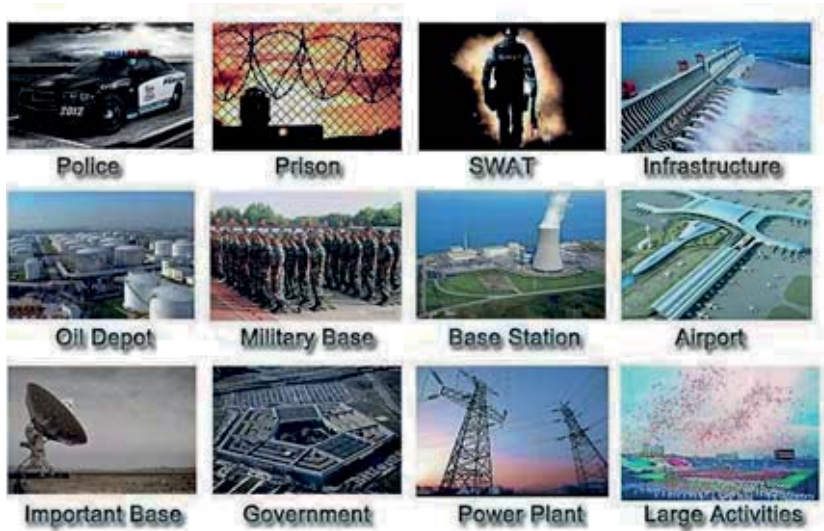> Channel: 2.4 Ghz
> Channel: 5.8 GHz
> Channel: 1.5 GHz

TECHNICAL SPECIFICATION

Size	735*235*102mm
Weight	6.15kg
Effective Range	2000-2500 meter,depends on real environment
Frequency & Output Power	410 - 485 MHz (433 MHz) 10W
	840 - 920 MHz (900MHz) 10W
	1100 - 1280 MHz (1.2 GHz) 10W
	1300 - 1390 MHz (1.4 GHz) 10W
	1560 - 1620 MHz (1.5 GHz) 30W
	2400 - 2500 MHz (2.4 GHz) 50W
	5150 - 5350 MHz (5.2 GHz) 30W
	5725 - 5850 MHz (5.8 GHz) 50W
Inside Antenna Gain	433Mhz /5dBi
	2400MHz /14dBi
	2400MHz /14dBi
	GPSL1-L5 (1.2G/11dBi; 11.5G/12dBi)
	5800MHz /16dBi
	5200MHz /16dBi
	900MHz. /9dBi
Output Power	Total 230 Watt
Battery Use Time	40-50 minute
Working temperature	-40°C to +65°C
Power Supply	24V 10A inside lithium - ion battery (It can be designed to connect the external battery)
Relative Humidity	35~85%

APPLICATION

To avoid the rapidly emerging threat by UAV, our jammer can be used in below recommend places:
1. Government: Prison, Court, Military, Police, other Law enforcement, etc
2. Infrastructure: Petrol Station, Oil Depot, Gas Station, Airport, Drug rehabilitation centers, Security agency, etc
3. Public&Events: Stadium&Events, Important Meetings,etc
4. Transportation: Port&marine, Superyachts, etc
5.Detention Centers, School (examination,library,etc),Theatre,Church, Hospital,etc
6. Personal VIP&Privacy,etc

Police Prison SWAT Infrastructure

Oil Depot Military Base Base Station Airport

Important Base Government Power Plant Large Activities

CAUTION

1. All band open at same time will consume large power;
please use it less than 10 minutes to lengthen the battery life time;
2. Please fully charge the jammer before use
3. Please ensure the jamming frequency is suitable for your own need, or it can not be used effectively
4. Forbidden to use while charging
5. Barriers between the UAV and jammer will influence the jamming distance

CUSTOMER SERVICE

* User Instruction
we can offer online details photo illustration and video;
local instruction is also available but with extra cost
* Online technical support: our professional engineers will assist customers
with technical problems
* After sales service:
our company will perform the agreed responsibility and duty during the warranty period

* Free training lesson and daily maintenance
* Fast reply of customer feedback and question
* All product enjoy the 1 year warranty and Life time maintenance service

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DETECTION AND JAMMING SYSTEM
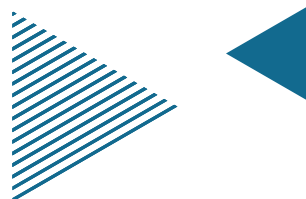C4I-UAV

DETECTION AND JAMMING SYSTEM
C4I-UAV

Presently Commercial drones has raised a privacy concerns among the people since most of the drones flies equipped with high quality cameras which can invade people privacy, taking photo of people and personal property. Also drones can be used to smuggle drugs, crash into buildings, act as peeping Toms, drop bombs, shoot guns, and gather personal data on anyone whom drone pilot want to harm. Hence a Jammer to block drones remote control signal to protect our privacy and personal space is required.
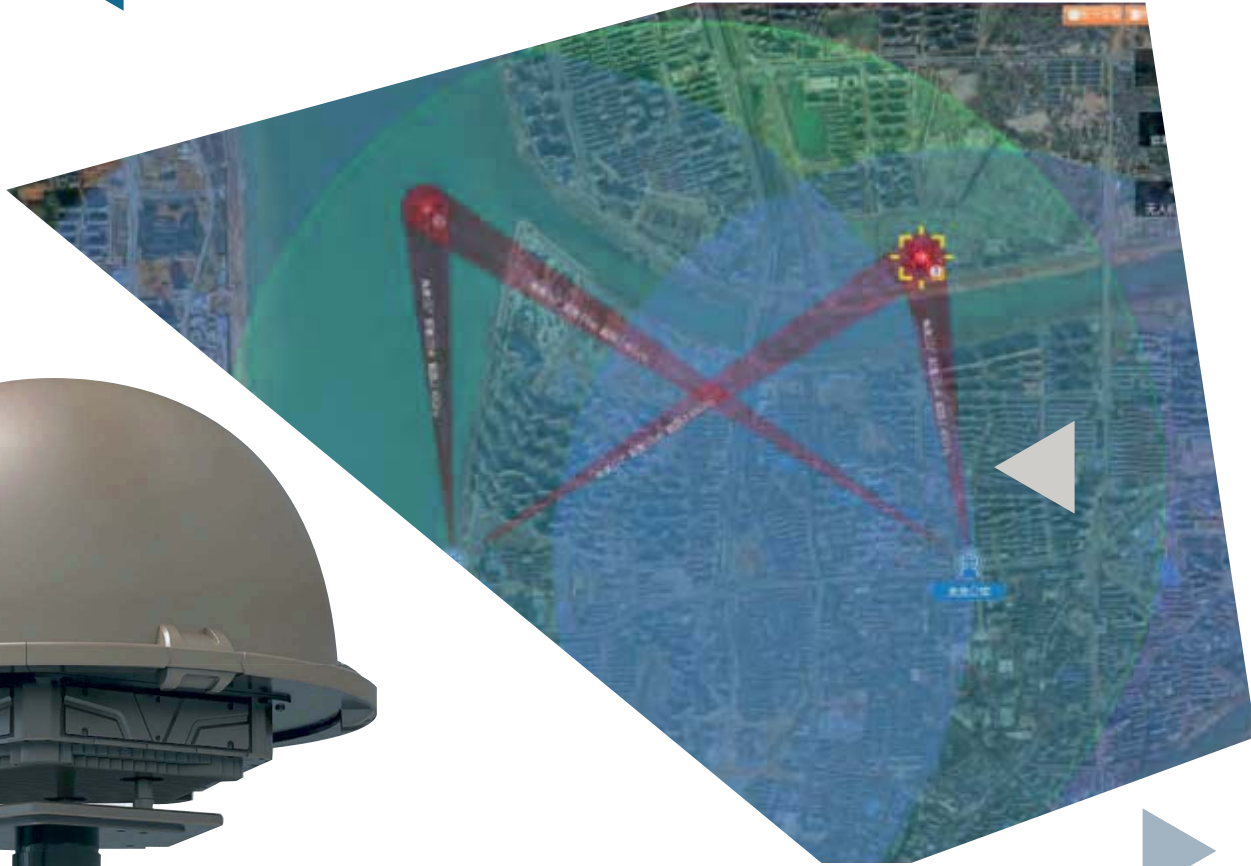
C4I-UAV provides protection against drones threatening safety, security and privacy. Our state of the art detection and countermeasure products aid your security force against the significant and growing threats that drone techno logy makes possible.

FULL 360° SCANNING C4I-UAV RF MONITORING SYSTEM

WF-C4I-SW 360

▸ Open Protocol. The system can be integrated with Radar and optical camera detection systems. It can be also interactive with RF jamming or any shooting systems.

▸ Usually up to 5-8 km(In Open Air), even further, still determined by the environment capability to track the operator who controls the drones.

▸ 360 degree coverage detection with direction and altitude.

▸ Allows a 24/7 monitoring and recording without any gaps.

▸ Through the spectrum analyzing and direction finding to detect the drones, calculate the azimuth angle.

▸ Intelligent identify the drone manufacturer brand, model number and frequency of the drone.

▸ Intelligent analyzing i.e. automatic alarm by sound and light, automatically generate the summary report.

TECHNICAL SPECIFICATION

Frequency Range	300MHz~6000MHz
Detection Radius Range	5~8km(In Open Air)
Azimuth Range	360"
Angle Accuracy	≤3°(rms)
Receiver Channels	10
Real Time Bandwidth	120MHz
First time Acquire time	≤35
Targets at the Same Time	≤40

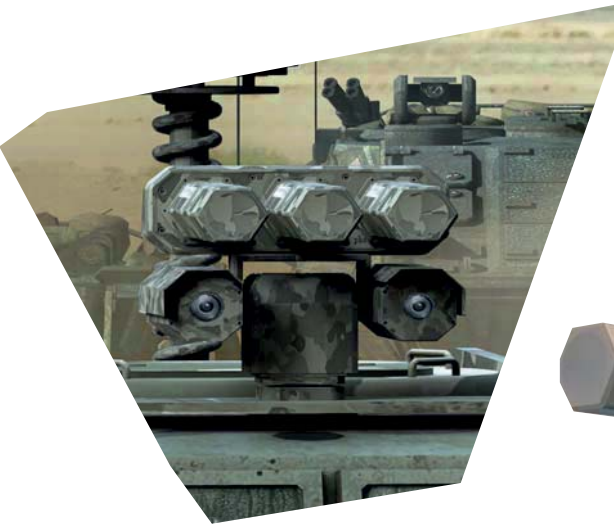# VEHICLE MOUNTING C4I-UAV DETECTION AND JAMMING SOLUTION

Considering some special purpose cars are tactical and flexible detection and jamming system are mounted on such kind of cars. It can be quickly deployed in different facilities, such as convoy cars, international summits, big important matches, military compounds and so on.

The operator inside the car can make a full control of drone detection and jamming system.

Two or three systems deployment can be triangulated and make a more accuracy location.

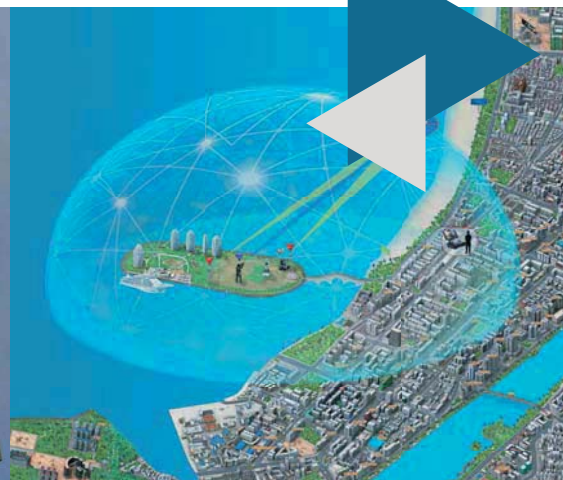It can prevent all the intruding drones attacking the target zones with a bigger coverage.

While several drones attack the target zones, the high power omni directional UAV jamming system can be quickly to be switched on to ensure the safety of the designated areas
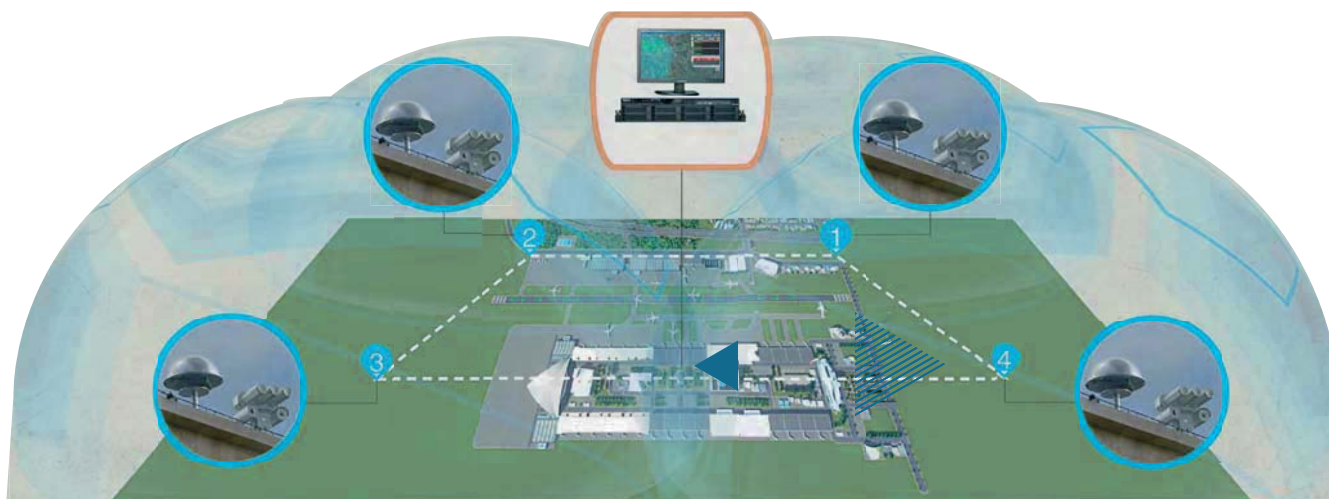
TECHNICAL SPECIFICATION

Directional C4I UAV Jamming System	Model No. K7
RF Frequency Band(MHz)	**RF Output Power (Watt)**
900-930MHz	20 W
1574-1576MHz GPSL1	10 W
2400-2485MHz	20 W
5725-5850MHz	10 W
1226-1228MHz GPSL2	10 W
430-435MHz	30 W
840-869MHz	20 W
Jamming Range	>1.5Km

OUTDOOR STATIONARY C4I-UAV DETECTION AND JAMMING SYSTEM

security guards are able to monitor the drones detection and jamming system via a big display screen set in the commanding center to guarantee safety of the fixed places in the outdoor .

Multi systems can be triangulated by putting in 2 or 3 fixed places on the roof of the building to make a more accurate location. The system can prevent all the potential intruding drones.

In case that several drones attack the target zones, the high power omni directional UAV jamming system can be quickly to be switched on to ensure the safety of the designated areas.

Directional C4I UAV Jamming System	Model No. K4
RF Frequency Band	RF Output Power (Watt)
900-930MHz	20 W
1574-1576MHz	10 W
2400-2485MHz	20 W
5725-5850MHz	10 W
Jamming Range	>1.5km

PORTABLE DRONE DETECTION AND JAMMING SYSTEM

The portable tactical system can be installed on a extendable mast quickly and set up within 10 mins. Easily to be dismounted and mounted up in demand of the different missions.

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INTEGRATED DRONE DETECTION JAMMING
C4I-HC-DECT2J

INTEGRATED DRONE DETECTION JAMMING C4I-HC-DECT2J

OVERVIEW

The C4I-HC-DECT2J vehicle mounted drone detection (also could be fixed solution) and control integrated equipment integrates detection, positioning, and countermeasures units, which can achieve detec-tion, identification, positioning, tracking, and interference disposal of invasive drones. This device can monitor the serial number, model, position (longitude, latitude, azimuth), speed, altitude, takeoff point, return point, trajectory, remote control position (longitude, latitude, azimuth) and other multidimensional information of drones within the monitoring range through deep analysis and data mining of drone signals. The equipment adopts an integrated industrial design, with a simple and concealed appearance, strong environmental adaptability, flexible deployment methods, and can be installed and erected in a vehicle or fixed manner.

This device is suitable for low altitude security in scenarios such as large-scale event support, public security patrols, border defense, accompanying protection of political figures, military management zones, power and petrochemical parks, and airports. It can work offline on a single machine, flexibly and quickly deploy, and respond flexibly, meeting the needs of various scenarios.

PRODUCT COMPOSITION

This product mainly consists of five parts: equipment host, power box, bracket, heavy-duty wire, and accessories, as shown in the table below：

Table Product Hardware Composition Details

Serial Number	Device Name	Number	Unit
1	Device host	1	PCS
2	Power box	1	PCS
3	Heavy load line	1	PCS
4	Support	1	PCS
5	Parts	1	PCS

FUNCTION

1）**Drone detection:** It can detect and identify the brand, model, frequency, and other informa-tion of invading drones.

2）**Drone positioning:** It can locate the position information of the DJI series of drones, and display real-time drone position (longitude and latitude), azimuth information, distance information (distance from the drone to the location of the equipment), speed, height, etc.

3）**Flying Hand Positioning:** It can locate the position information of the flying hand of the DJI unmanned aerial vehicle, and display the real-time position (longitude and latitude), azimuth infor-mation, and distance information of the flying hand (remote control) relative to the position of the equipment.

4）**Unique identification code recognition:** It can identify the unique serial number of the DJI series drone and confirm the unique identification information of the drone.

5）**Integrated detection and strike:**　The device can automatically counter attack the drone after detecting and identifying it.

6）**Multi target trajectory tracking:** Capable of achieving multi target drone positioning and tracking, while displaying multiple drone flight trajectories.

SYSTEM FUNCTION

1）**Black and white list:** It can distinguish between cooperative and non-cooperative drones, and the device will not give an alarm when detecting cooperative drones. It can also label coopera-tive drones with trust.

2）**Intrusion alarm:** When a drone invasion is detected, an audible or visual alarm will be trigge-red.

3）**Trajectory playback:** Support drone flight trajectory playback, assist security personnel in analyzing historical drone flight data.

4）**Detection Record:** The detection record list can retain historical detection records, including multidimensional information such as drone serial number, model, frequency, etc.

5）**Data and information visualization analysis:** Support UAV detection and flight data statisti-cal analysis, which can be presented by visualization methods such as thermal diagram and Line chart;

6）**Electronic map:** Supports electronic map switching, including Gao de, Bing, Baidu, etc.

PRODUCT FEATURES

1）**Integrated design:** All working modules of the equipment are integrated into a protective cover, which adopts a low wind resistance design to maintain stability and safety of the vehicle in high-speed motion;

2）**Mobile operation:** The equipment has the ability to detect and counter drones during high-speed movement;

3）**All detection models:** The system can identify and detect common brands of drones such as DJI, AUTEL, Dahua, YUNEEC, as well as the vast majority of models on the market such as self-made traversing machines and WiFi machines;

4）**Passive detection:** The equipment does not emit any electromagnetic signals, has no electro-magnetic environmental pollution, and is environmentally friendly;

5）**Three all-around readiness:** The equipment operates continuously day and night for 7*24 hours, 24/7 (suitable for complex electromagnetic environments and harsh weather environments), and provides comprehensive (360° detection of drone intrusion) security in the core area;

6）**Multi-unit network:** Devices can be connected to the backend control platform through networking, and the multi-unit network meets the needs of large area coverage.

PRODUCT INDEX PARAMETERS

PERFORMANCE INDEX

Product Performance Indicators - Detection Positioning

Number	Index	Parameter	Notes
1	Detection and identification of drone types	DJI series drones, FPVs, Xiaomi, Yuneec, Hubsan, Hubson, Power vision, Tello drones etc.	
2	Localizable drone models	DJI mavic, air, mini, FPV, avata. etc	
3	Detection frequency band	100MHz~6GHz	
4	Detection and positioning distance	1~5km	Depending on the environment
5	Detection height	0m~1000m	
6	Number of targets that can be detected simultaneously	≥10 sorties	
7	Capable of simultaneously tracking and displaying drone trajectories	≥5strip	
8	Azimuth error	≤1°（RMS）	
9	Positioning accuracy	≤10m	
10	Detection success rate	≥97%	
11	Identify response time	≤3s	

Product Performance Indicators - Reaction

Number	Index	Parametre	Notes
1	Operation mode	Radio jamming suppression	
2	Object of action	UAV image transmission, flight control link, navigation signal	

Number	Index	Parameter	Notes
3	Action frequency band	（820±10）MHz～（960±10）MHz （1545±10）MHz～（1650±10）MHz （2390±10）MHz～（2520±10MHz （5690±10）MHz～（5880±10）MHz	
4	Transmitting power	Output power of each port (average power)： Channel 1：（41±2）dBm Channel 2：（40±2）dBm Channel 3：（41±2）dBm Channel 4：（37±2）dBm	
5	Reverse distance	1.5km-2km (there may be some differences depending on the environment and model)	Depending on the environment
6	Counter mode	Directional and omnidirectional	

MECHANICAL PARAMETERS
Product Mechanical Parameters

Number	Index	Parameter	Notes
1	Weight	≤30kg	host
2	Size	Φ*H(600mm*420mm)±2mm	

ELECTRICAL CHARACTERISTICS
Product electrical characteristics

Number	Index	Parameter	Notes
1	Overall Power	Detection only: 55 ± 5W Reverse full open: 1500 ± 5W	
2	External power supply voltage	100~240V	

ENVIRONMENTAL ADAPTABILITY
Environmental adaptability

Number	Index	Parameter	Notes
1	Operation temperature	-20~65℃	
2	Protection grade	IP65	

SAFETY STANDARDS

ELECTROMAGNETIC COMPATIBILITY

The device meets the following EMC standards:
GB/T 17626.2-2018 Electromagnetic compatibility test and measurement technology - Electrostatic discharge immunity test;
GB/T 17626.3-2006 Electromagnetic compatibility test and measurement technology - Radio frequency electromagnetic field radiation immunity test;
GB/T 17626.4-2018 Electromagnetic compatibility test and measurement technology - Electrical fast transient burst immunity test;
GB/T 17626.5-2019 Electromagnetic compatibility test and measurement technology - surge (shock) immunity test;
GB/T 17626.6-2017 Electromagnetic Compatibility test and measurement technology - Conducted Disturbance Immunity Test for Radio Frequency Field Induction;
GB/T 17626.11-2008 Electromagnetic Compatibility test and measurement technology - Immunity Tests for Voltage Saggs, Short Interruptions and Voltage Changes;
All of the above tests are carried out according to Severity Level 3.
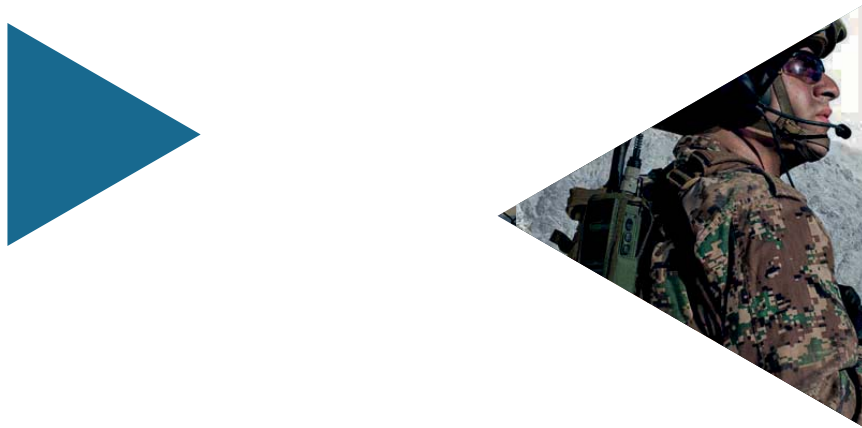
ELECTRICAL SAFETY

The equipment meets the following electrical safety-related standards:
GB 16796-2009 Safety Prevention Alarm Equipment - Safety Requirements and Experimental Methods.

ENVIRONMENTAL SECURITY

The electric field strength of the electromagnetic environment meets the requirements of the public exposure control limit in the GB 8702-2014 standard.