UNIRADAR

LOW-ALTITUDE AIRSPACE MANAGEMENT INTEGRATED SOLUTION

AI-Driven Spectrum Allocation & Multi-Domain Governance

Low Altitude Airspace Management Solution p2
Integrated Defense System URS680 ..... p4
Drone Detection and Countermeasure Integrated Gun URA500 ..... p6
Drone Detection Device URD360 ..... p8
Drone Detection Device URD350A p10
Drone Detection Device URD320 ..... p12
Omnidirectional Drone Countermeasure Device URJ200 ..... p14
Drone Detection and Countermeasure Integrated System URA400 ..... p16
Drone Detection Device URD320P p18
Portable Drone Detection Device URD310H p20
FPV Drone Detection and Countermeasure Integrated System URA560 ..... p22
Vehicle-mounted Drone Detection and Countermeasure Integrated System URA560C p24
Solutions and Case Studies p26

ABOUT UNIRADAR

Uniradar Technology, established in 2015, is a global pioneer in intelligent airspace security solutions. Specializing in integrated drone detection, identification, countermeasure and control systems, we deliver cutting-edge R&D, manufacturing and system integration services for unmanned aerial threat management. Leveraging core competencies in AI-powered surveillance networks and multi-spectral sensing architecture, the company advances operational excellence through continuous innovation. Our proprietary digital infrastructure enables real-time cross-domain security operations in dynamic airspaces, providing comprehensive protection for critical assets and personnel.

2015-2016

【SETTING SAIL】

Uniradar Technology was established.

2017-2018

【SECURING THE MARKET POSITION】

Launched the URD120 Radio Detection and Direction Finding Equipment.

Introduced the industry's first full-band direction-finding product, the URD360.

2019-2020

【STRATEGIC LEAP】

Achieved breakthroughs in core technologies for complex electromagnetic environments.

2021

【SOLIDIFYING MARKET POSITION】

Launched the URA550 Active Defense Product.

Achieved breakthroughs in core intelligent recognition technologies.

2022

【DIVERSIFIED EXPANSION】

Launched full-band countermeasure products.

2023

【SYSTEM UPGRADE】

Released the URA560 Detection-jamming integrated product.

Proposed a holistic solution to counter drone swarm threats.

Completed the development and deployment of the URS Series Integrated Defense System.

2024

【PRODUCT EXCELLENCE】

Launched the URD310H Portable Drone Detection Device.

Released the URA560 FPV Drone Detection and Countermeasure Integrated System.

2025

【INNOVATION FOR THE FUTURE】

Launched the URA500 Drone Detection and Countermeasure Integrated Gun.

Premiered the URS680 Integrated Defense System.

...

LOW-ALTITUDE MANAGEMENT SOLUTION

Command Center
Management Platform

Drone Detection
Device

FPV Drone
Detection & Countermeasure
Integrated System

Drone Detection &
Countermeasure
Integrated Gun

Integrated Defense
System

By integrating **multi-sensor systems with IoT A technology** and adopting a **big data-driven approach,** we construct a **three-dimensional security management and control platform** based on dynamic-static scenarios encompassing **points, lines, and planes**. This platform drives the **orderly development of the low-altitude economy** and provides **multi-domain precise governance** to ensure and support the **intelligent upgrade of low-altitude security.**

Vehicle-mounted Drone Detection & Counter-measure Integrated System

Omnidirectional Drone Countermeasure Device

Electro-optical Tracking Device

Mobile Terminal

URS680

Integrated Defense System

The URS680, developed by Uniradar Technology, is a next-generation integrated drone defense system. It combines radio monitoring, radar tracking, electro-optical identification, full-band jamming, navigation spoofing, and precision control of drone swarms into a unified platform, delivering comprehensive multi-layered protection for low-altitude security scenarios.

KEY SPECIFICATIONS

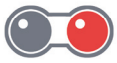
Radio & Radar Detection Range	≥ 5kM
Electro-Optical Tracking Range	Visible Light 3 km / Infrared 1.5 km
Jamming & Spoofing Range	4km
Detection Frequency Band	300MHz~6000MHz
Jamming Frequency Band	300MHz~6000MHz
Navigation Spoofing	GPS/L1, BDS/B1I, GLONASS/R1, GALILEO/E1

Main Features

Full-band detection

Full-band jamming and countermeasures

Radar tracking



Electro-optical coordination

Navigation spoofing

Precision strike against drone swarms

Product Advantages

Highly integrated design for rapid deployment.

Active-passive collaboration enables precise detection.

Full-band coverage with intelligent countermeasures.

Multi-source fusion powered by advanced algorithms.

Application Scenarios

Suitable for high-value fixed facilities, such as:

- Airports
- Oil fields
- Chemical plants
- Nuclear power stations

Radio Direction-Finding Accuracy	≤ 3° (RMS, in open areas with favorable electromagnetic conditions)
Radar Detection Accuracy	Azimuth: ≤ 0.4° , Elevation: ≤ 0.5° , Range: 10m
Operational Coverage	360°
Weight	≤ 600kg
Dimensions	2500mm×2500mm×2650mm

URA500

Drone Detection and Countermeasure Integrated Gun

The URA500 is a handheld Detection and Countermeasure Integrated product designed for countering illegal flights of commercial and DIY drones. It features spectrum-based direction finding, protocol analysis, precision jamming against drone swarms, and software-defined full-band jamming, ensuring robust defense capabilities. The Plus Version supports optional infrared and visible-light lenses for automatic tracking and video/image forensics of unauthorized low-altitude drones. Ideal for event security and on-site patrols requiring rapid drone neutralization.

Product Advantages

High sensitivity, low false alarm rate

Protocol analysis to locate drones and operators

Software-defined jamming frequency bands

Precision jamming against drone swarms

Dual-optical lens configuration for video tracking and forensics

Compact, lightweight design with high mobility

KEY SPECIFICATIONS

Detection Frequency Band	433MHz, 845MHz, 915MHz, 1.2GHz, 1.4GHz, 2.4GHz, 3.3GHz, 5.2GHz, 5.8GHz (supports expansion from 300 MHz to 6 GHz)
Jamming Frequency Band	900MHz, 1.4GHz, 1.5GHz, 2.4GHz, 5.2GHz, 5.8GHz (software-customizable from 300MHz to 6GHz)
Detection Range	0.5km~2.5km (dependent on electromagnetic conditions)
Direction-Finding Accuracy	10°（RMS）
Jamming Range	0.5km~1.5km (varies with environment and drone model)

Main Features

Multi-band jamming and countermeasures

Operator localization

Spectrum-based direction finding

Precision jamming against drone swarms

Dual-optical imaging (Plus Version)

Application Scenarios

Designed for mobile law enforcement operations and security for large-scale events.

Detectable and Identifiable Drone Models	DJI, Autel, Powervision, Wuxiang, and other common commercial drones and FPV drones (expandable model database).
Localizable Models	Drones using DJI OcuSync 2/3 transmission protocols and GB/T-standard telemetry protocol drones.
Weight	≤ 6kg (excluding carrying straps)
Dimensions	685mm×298mm×110mm

URD360

Drone Detection Device

The URD360 is an intelligent low-altitude security device designed for full-band detection, identification, and direction finding of drone radio signals. It integrates advanced technologies including a full-band direction-finding antenna array, wide-band signal sensing, AI spectrum signal recognition, protocol analysis, and multi-source fusion positioning.

Product Advantages

Full-band direction finding

Long detection range

High direction-finding accuracy

High real-time performance with low false alarm rate

100% localized solution (domestically developed and controlled)

KEY SPECIFICATIONS

Detection Frequency Band	20MHz~6000MHz
Direction-finding frequency band	300MHz~6000MHz
Detection Range	≥ 10km (spectrum-based detection, varies with environment and drone model) ≥ 3km (DJI drone telemetry protocols, varies with environment and model) ≥ 1km (GB/T-standard telemetry protocols, varies with environment and model)
Direction-Finding Accuracy	≤ 3° (RMS, in open areas with favorable electromagnetic conditions)
Detection coverage	360°

Main Features

24/7 unmanned operation

Panoramic scanning capable of detecting non-database targets

Full-band direction finding

Supports allowlist/ blocklist management with one-click allowlist addition

Protocol analysis to locate drones and operators

Customizable signature database

Application Scenarios

Suitable for:

- Civil aviation clearance zones
- Energy facilities
- Government restricted sites
- Security for large-scale events

Deployment options: fixed installation, vehicle-mounted mobility, or tripod mounting.

False alarm rate	≤ 1%
Simultaneous drone detection capacity	≥ 30 drones
Dimensions	Diameter 595 mm × Height 575 mm
Weight	≤ 25kg
Protection rating	IP66

URD350A

Drone Detection Device

The URD350A is an intelligent low-altitude security device designed for radio signal detection and key-band direction finding of drones. It incorporates advanced technologies such as a key-band direction-finding antenna array, AI spectrum recognition, and protocol analysis.

Product Advantages

Combined spectrum detection and protocol analysis

Long detection range

High real-time performance with low false alarm rate

Area-selection recognition and direction finding for unknown targets in key frequency bands

KEY SPECIFICATIONS

Detection Frequency Band	300MHz~6000MHz
Direction-finding frequency band	433MHz, 845MHz, 915MHz, 1.2GHz, 1.4GHz, 2.4GHz, 3.3GHz, 5.2GHz, 5.8GHz
Detection Range	≥ 5km (spectrum-based detection, varies with environment and drone model) ≥ 2km (DJI drone telemetry protocols, varies with environment and model) ≥ 1km (GB/T-standard telemetry protocols, varies with environment and model)
Direction-Finding Accuracy	≤ 5° (RMS, in open areas with favorable electromagnetic conditions)
Detection coverage	360°

Main Features

Unmanned operation with automatic drone data logging

Automatic calibration and GPS positioning

Key-band direction finding

Supports allowlist/ blocklist management with one-click allowlist addition

Protocol analysis to identify drone models and operator information

Area-selection recognition and direction finding for unknown drone signals

Application Scenarios

Suitable for:

- Civil aviation clearance zones
- Energy facilities
- Government restricted sites
- Security for large-scale events

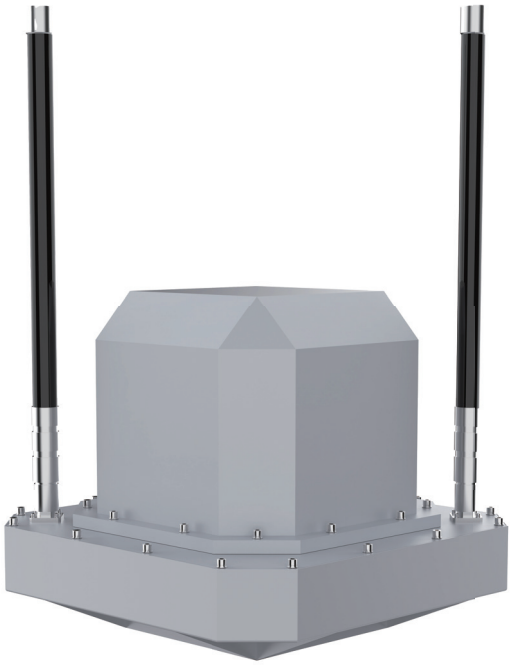
Deployment options: fixed installation, vehicle-mounted mobility, or tripod mounting.

False alarm rate	≤ 1%
Simultaneous drone detection capacity	≥ 10 drones
Dimensions	Diameter 595 mm × Height 450 mm
Weight	≤ 18kg
Protection rating	IP65

URD320

Drone Detection Device

The URD320 is an intelligent low-altitude security device designed for key-band detection, identification, and localization of drone radio signals. It integrates technologies such as a key-band omnidirectional antenna array, AI spectrum recognition, and protocol analysis.



Product Advantages

Compact design

Combined spectrum detection and protocol analysis

High real-time performance with low false alarm rate

KEY SPECIFICATIONS

Detection Frequency Band	845MHz, 915MHz, 1.2GHz, 1.4GHz, 2.4GHz, 3.3GHz, 5.2GHz, 5.8GHz (supports expansion from 300 MHz to 6 GHz)
Detection Range	≥ 2km (DJI drone telemetry protocols, varies with environment and model) ≥ 1.5km (spectrum-based detection, varies with environment and drone model) ≥ 1km (GB/T-standard telemetry protocols, varies with environment and model)
Detection coverage	360°
Detection response time	< 3s
Simultaneous drone detection capacity	≥ 10 drones

Main Features

Unmanned operation

Autonomous GPS positioning

Key-band detection

Supports allowlist/ blocklist management with one-click allowlist addition

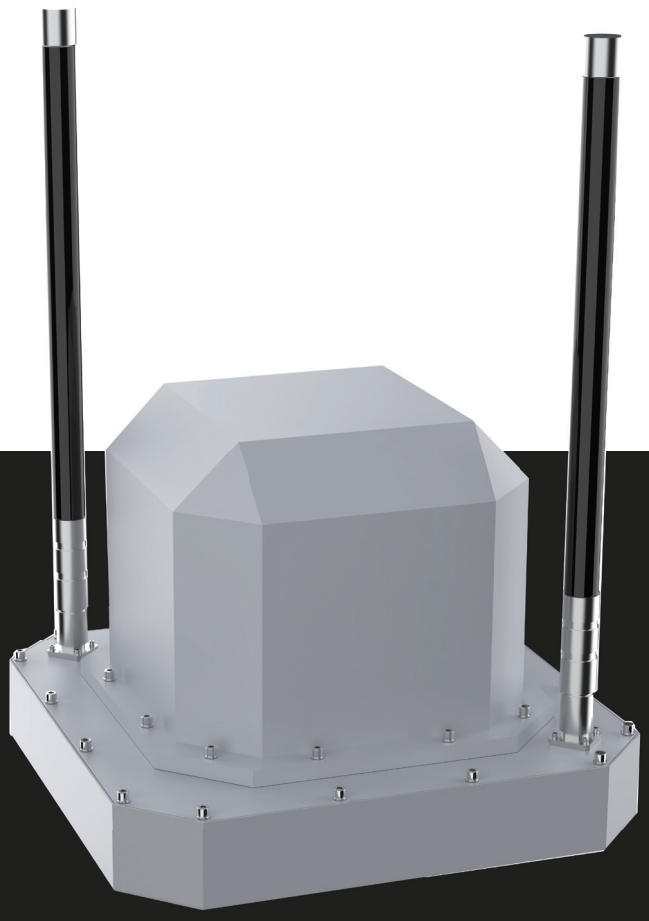
Protocol analysis to locate drones and operators

Customizable signature database

Application Scenarios

Designed for critical infrastructure protection and large-scale event surveillance, including:

- Nuclear power plants
- Government buildings
- Sports events
- Concerts



Power consumption	≤ 40W
Operating temperature	-30℃ ~ +55℃
Dimensions	325mm×325mm×280mm (excluding external antennas)
Weight	≤ 5kg
Protection rating	IP65

URJ200

Omnidirectional Drone Countermeasure Device

The URJ200 is an omnidirectional drone countermeasure system designed to forcibly disrupt radio signals (remote control, video transmission, and positioning) of drones or RC aircraft in flight, ensuring low-altitude airspace security within protected areas. It can operate standalone or integrated with drone detection systems.

Product Advantages

Long jamming range

Customizable frequency bands

Cost-effective and easy to deploy

Covers mainstream drone frequency bands

Active air-cooling design for sustained performance

KEY SPECIFICATIONS

Jamming Frequency Band	900MHz, 1.2GHz , 1.4GHz , 1.5GHz, 2.4GHz, 3.3GHz, 5.2GHz, 5.8GHz (customizable)
Jamming Range	≥ 1km (varies with environment and drone model)
Response time	≤ 3s
Transmission power consumption	≤ 600W
Operating temperature	-30℃ ~+55℃
Protection rating	IP65

Main Features

Unmanned operation

Omnidirectional jamming

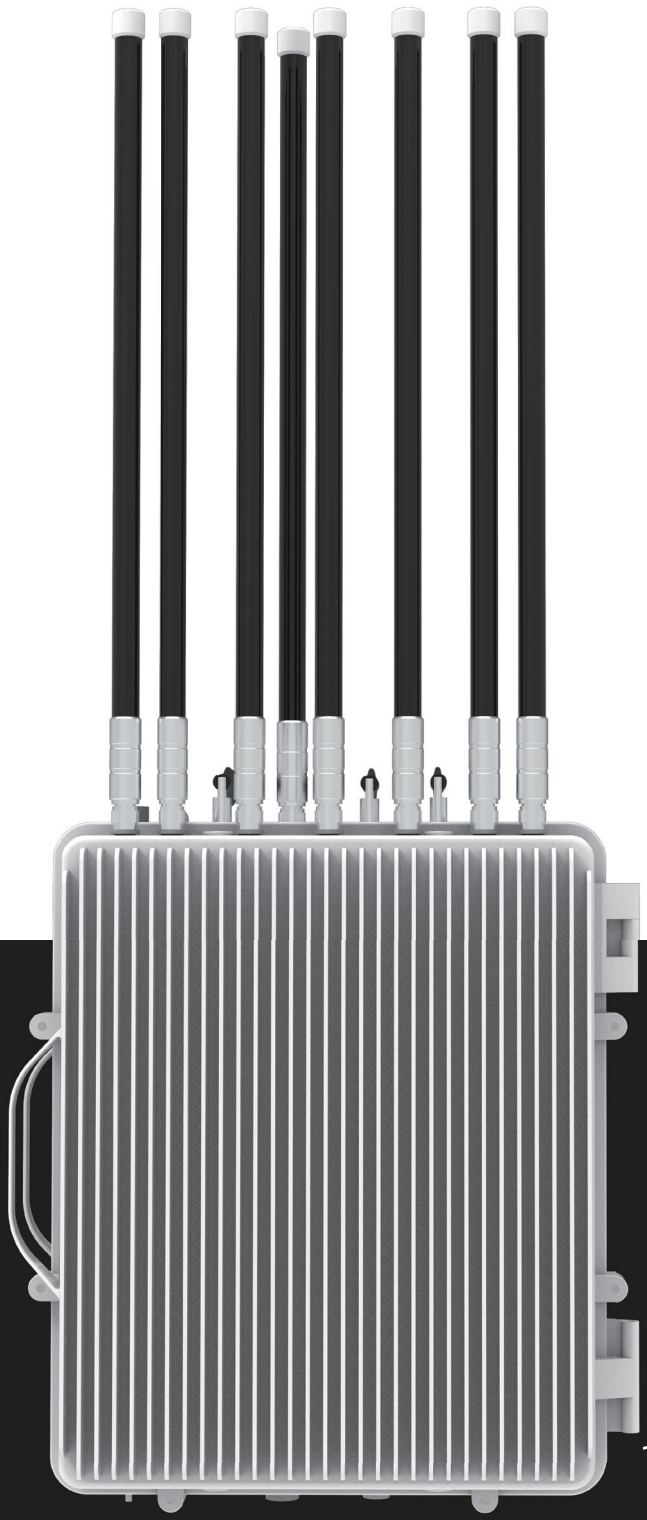
Integration with detection system

Application Scenarios

Suitable for:

- Border defense
- Energy facilities
- Government restricted sites

Deployment: Fixed installation in designated security zones.



Control method	Network control
Power supply	External 220V AC
Antenna	High-gain omnidirectional antenna
Dimensions	490mm×450mm×235mm (excluding antennas)
Weight	≤ 33kg

URA400

Drone Detection and Countermeasure Integrated System

The URA400 is a Drone Detection and Countermeasure Integrated System that combines spectrum-based detection and protocol analysis to identify and locate drone signals, enabling early warning of drone threats. Its jamming unit disrupts drone satellite navigation signals and communication links by transmitting radio interference, forcing drones to land or return to their origin.

Product Advantages

Integrated Detection and strike capabilities

Locates drones and operators

High recognition accuracy with low false alarm rate

Wide jamming frequency coverage and customizable frequency bands

KEY SPECIFICATIONS

Detection Frequency Bands	433MHz, 845MHz, 915MHz, 1.2GHz, 2.4GHz, 3.3GHz, 5.2GHz, 5.8GHz (supports expansion from 300 MHz to 6 GHz)
Jamming Frequency Bands	900MHz, 1200MHz, 1.4GHz, 1.5GHz, 2.4GHz, 3.3GHz, 5.2GHz, 5.8GHz
Detection Range	≥ 2km (DJI drone telemetry protocols, varies with environment and model) ≥ 1.5km (spectrum-based detection, varies with environment and drone model) ≥ 1km (GB/T-standard telemetry protocols, varies with environment and model)
Jamming Range	≥ 1km
Response time	< 3s

Main Features

Unmanned operation

Omnidirectional jamming

8-band jamming

Operator localization

Spectrum-based alerting

Integrated detection and strike capabilities

Application Scenarios

Suitable for:

- Border defense
- Energy facilities
- Government restricted sites

Deployment: Fixed installation in designated security zones.

Operating temperature	-30℃ ~ +55℃
Control method	Network control
Protection rating	IP65
Weight	≤ 40kg

URD320P

Drone Detection Device

The URD320P is a briefcase-style, portable drone detection system integrating hardware and software. Equipped with a comprehensive drone command and control platform, it enables real-time detection of multi-dimensional data, including drone serial numbers, models, location, speed, altitude, elevation, takeoff/return points, flight paths, and operator positions.

Product Advantages

Long detection range

High sensitivity with low false alarm rate

Portable design and high mobility

Extended battery life

User-friendly touchscreen interface

KEY SPECIFICATIONS

Detection Frequency Bands	845MHz, 915MHz, 1.2GHz, 2.4GHz, 3.3GHz, 5.2GHz, 5.8GHz
Detection Range	3km (under line-of-sight and favorable electromagnetic conditions)
Detection coverage	360°
Response time	< 3s
Localization accuracy	≤ 5m

Main Features

Unmanned operation with automatic drone data logging

GPS positioning

Protocol analysis to identify drone models and operator information

Supports allowlist/ blocklist management with one-click allowlist addition

Application Scenarios

Suitable for:

- Security for large-scale events
- Public safety patrols
- VIP protection details
- Border defense
- Military restricted zones
- Power and petrochemical industrial parks

Analysis and localization accuracy	< 5m
Simultaneous drone reporting capacity	≥ 10 个
False alarm rate	≤ 1%
Dimensions	510mm×425mm×240mm
Weight	≤ 18kg
Protection rating	IP65

URD310H

Portable Drone Detection Device

The URD310H is a compact drone detection device designed for individual operator use. It employs low-power digital-analog hybrid receiver technology and AI channel signal recognition technology.

Product Advantages

Cost-effective

Low false alarm rate

Portable design and high mobility

Extended battery life

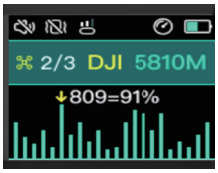
Simple operation

KEY SPECIFICATIONS

Detection Frequency Bands	845MHz, 915MHz, 1.2GHz, 1.4GHz, 2.4GHz, 3.3GHz, 5.2GHz, 5.8GHz (supports exPansion from 300 MHz to 6.2 GHz)
Detection Range	≥ 1km (under line-of-sight and favorable electromagnetic conditions)
Detection coverage	360°
Power supply	Replaceable lithium battery with Type-C fast charging and dock charging
Battery life	6 hours (2500 mAh battery capacity)

Main Features

Multi-alert modes: Audio, visual, and vibration alarms



Screen display: Shows detected drone models, categories, and battery status

Detects: DJI drones, Autel drones, and FPV drones

Identifies drones operating on non-standard frequencies

Application Scenarios

Designed for mobile law enforcement operations, including on-foot and vehicle-mounted patrols.

Dimensions	136mm×63mm×40mm (excluding antennas)
Weight	≤ 300g

URA560

FPV Drone Detection and Countermeasure Integrated System

The URA560 is a FPV Drone Detection and Countermeasure Integrated System designed for countering FPV (First-Person View) drones. Utilizing low-power radio signal detection technology, it extracts critical signal features from FPV drone video transmission signals. Combined with spectrum signature recognition technology, it achieves precise identification of FPV transmissions and delivers targeted jamming, disrupting the video feed to the operator's FPV goggles, thereby neutralizing the threat.

Product Advantages

Low-power design

Precision jamming

Broad frequency coverage

Low false alarm rate

KEY SPECIFICATIONS

Detection & Jamming Frequency Bands	1080MHz~1360MHz, 3310MHz~3495MHz, 4990MHz~5200MHz, 5362MHz~5945MHz
Detection Range	≥ 2km (line-of-sight conditions between device and drone)
Detection coverage	360°
Jamming Range	≥ 1.5km (jam-to-signal ratio of 3:1, line-of-sight conditions between device and operator)
Detection response time	≤ 2s

Main Features

Unmanned operation

Precision jamming against FPV drone

Upgradable drone model databas

Application Scenarios

Suitable for:

- Civil aviation clearance zones
- Energy facilities
- Government restricted sites
- Security for large-scale events

Deployment: Tripod mounting on flat ground, rooftops, or vehicle tops for flexible and convenient operation.

Jamming response time	≤ 1s
Weight	≤ 15kg
Dimensions	Diameter 500 mm × Height 495 mm
Protection rating	IP65

URA560C

Vehicle-mounted Drone Detection and Countermeasure Integrated System

The URA560C is a modular mobile security system that integrates spectrum detection devices, jamming units, and auxiliary components into a vehicle-mounted enclosure, forming a smart countermeasure platform with rapid deployment capabilities. Utilizing multi-band collaborative operation, it performs full-time scanning of drone communication frequencies. Combined with precise drone link suppression and GNSS navigation signal blocking, it establishes a "detection-identification-jamming" integrated dynamic protection framework, delivering 24/7, all-terrain low-altitude security solutions for critical scenarios such as event security, site protection, and emergency response.

Product Advantages

Broad frequency coverage

Precision jamming against FPV drones

Modular design

Detection-strike integration

Vehicle-mounted design with high mobility

KEY SPECIFICATIONS

Detection Frequency Bands	433MHz, 845MHz, 915MHz, 1.2GHz, 1.4GHz, 2.4GHz, 3.3GHz, 5.2GHz, 5.8GHz (supports expansion from 300MHz to 6GHz)
Jamming Frequency Bands	900MHz, 1200MHz, 1.4GHz, 1.5GHz, 2.4GHz, 3.3GHz, 5.2GHz, 5.8GHz
Detection Range	≥ 2km (under line-of-sight and favorable electromagnetic conditions)
Jamming Range	0.5km~1.5km (varies with environment and drone model)
Operational coverage	360°

Main Features

Unmanned operation with automatic drone data logging

GPS positioning

Precision jamming against FPV drones

Integrated detection and strike capabilities

Expandable protocol analysis to locate drones and operators

Customizable signature database

Application Scenarios

The system can be installed on rooftops of pickup trucks, SUVs, vans, or armored vehicles, and is ideal for:

- Large-scale events
- Sports events

Detection response time	3s
Jamming response time	≤ 5s
Dimensions	2320mm×950mm×470mm
Weight	≤ 55KG
Protection rating	IP65

SOLUTIONS AND CASE STUDIES

EVENT VENUES

This solution is designed for high-profile scenarios such as government events, international conferences, and sports competitions. It addresses illegal drone flights in urban dense areas by establishing a multi-layered defense architecture. The system integrates fixed, portable, and vehicle-mounted Detection-strike integrated equipment to achieve a 24/7 early warning and countermeasure loop. **Key Components: Fixed Detection-Strike Integrated Equipment, Portable Detection-Strike Integrated Equipment, Vehicle-Mounted Detection-Strike Integrated Equipment.**

CRITICAL RESTRICTED SITES

This solution applies to high-risk zones including prisons, classified facilities, and core restricted sites. It combines ground security measures (e.g., high walls, electronic fences, surveillance networks) with aerial defense systems for coordinated deployment. **Key Components: Fixed Detection-Strike Integrated Equipment, Portable Detection-Strike Integrated Equipment. Functionality: Provides 24/7 closed-loop protection against drone intrusions through monitoring → identification → countermeasure operations.**

AIRPORTS & RAILWAYS

This solution is designed for transportation hubs such as airports and railway systems, specifically addressing the surge in consumer-grade drones conducting unauthorized flights or aerial photography in restricted airspace. It integrates full-band detection, radio jamming, radar scanning, and electro-optical tracking technologies to establish three-dimensional airspace protection. **Key Technologies: Full-band detection, Radio countermeasures, Radar surveillance, Electro-optical tracking**

ENERGY FACILITIES

This solution applies to power plants, substations, oil depots, and other critical energy infrastructure. Unauthorized drone flights pose risks of fires, explosions, or power grid failures. Defending against drones ensures safe facility operations. The system employs radio detection and navigation spoofing equipment, while integrated drone countermeasure systems are recommended for oil storage zones. **Key Components: Radio detection systems, Navigation spoofing devices, Integrated drone countermeasure solutions (for oil facilities)**

UNIRADAR

UNIRADAR Technology Co., Ltd.

Address: 4th Floor, North Building, Meimei Mansion, Sanyi Avenue, Kaifu District, Changsha, Hunan Province, China

Tel: 0731-85564766 Website: www.uniradar.cn