



—A provider of radio-based IoT solutions

Low Altitude Unmanned Aerial Vehicle (UAV) Defense System



BITALLTECH (BEIJING) CO.,LTD.

Product terminal

1. Meet the needs of different protection levels

Provide systematic products with different protection levels, such as high, medium and simple for different protection needs.

2. Meet different deployment needs

Fixed, vehicle-mounted, portable and other application methods to meet different security needs.



3. Meet the needs of different scenarios

The Company provides various budget solutions and offers more than 10 solutions based on actual budget and scene requirements as follows:

Smart city grid UAV control solution

Prison guard UAV control solution

Smart military camp UAV control solution

Aviation airport UAV control solution

Power facility UAV control solution

Hazardous chemical station UAV control solution

Oil depot, chemical park UAV control solution

Migratory bird habitat UAV control solution

Folk culture village UAV control solution

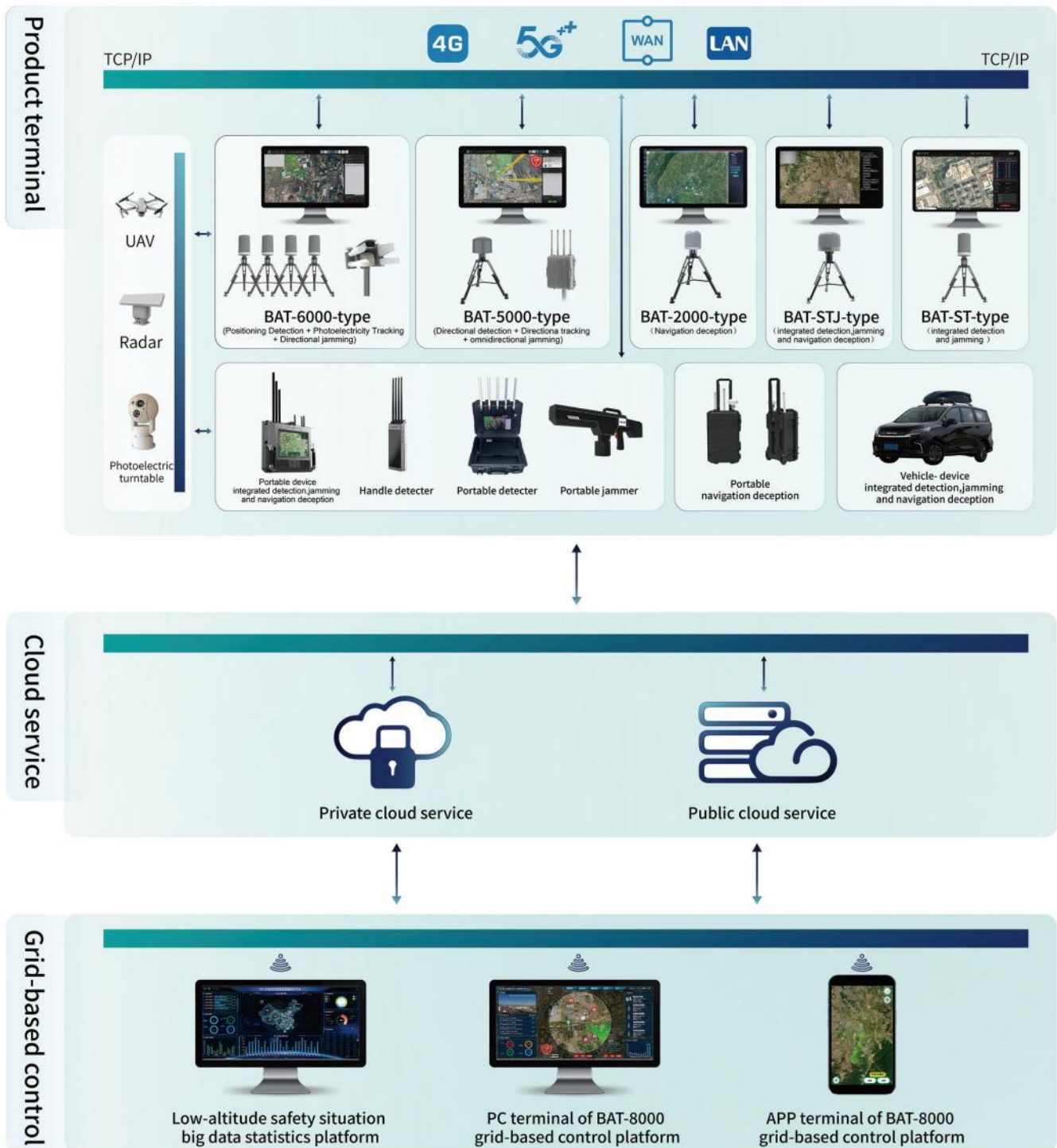
Vehicle-mounted UAV control solution

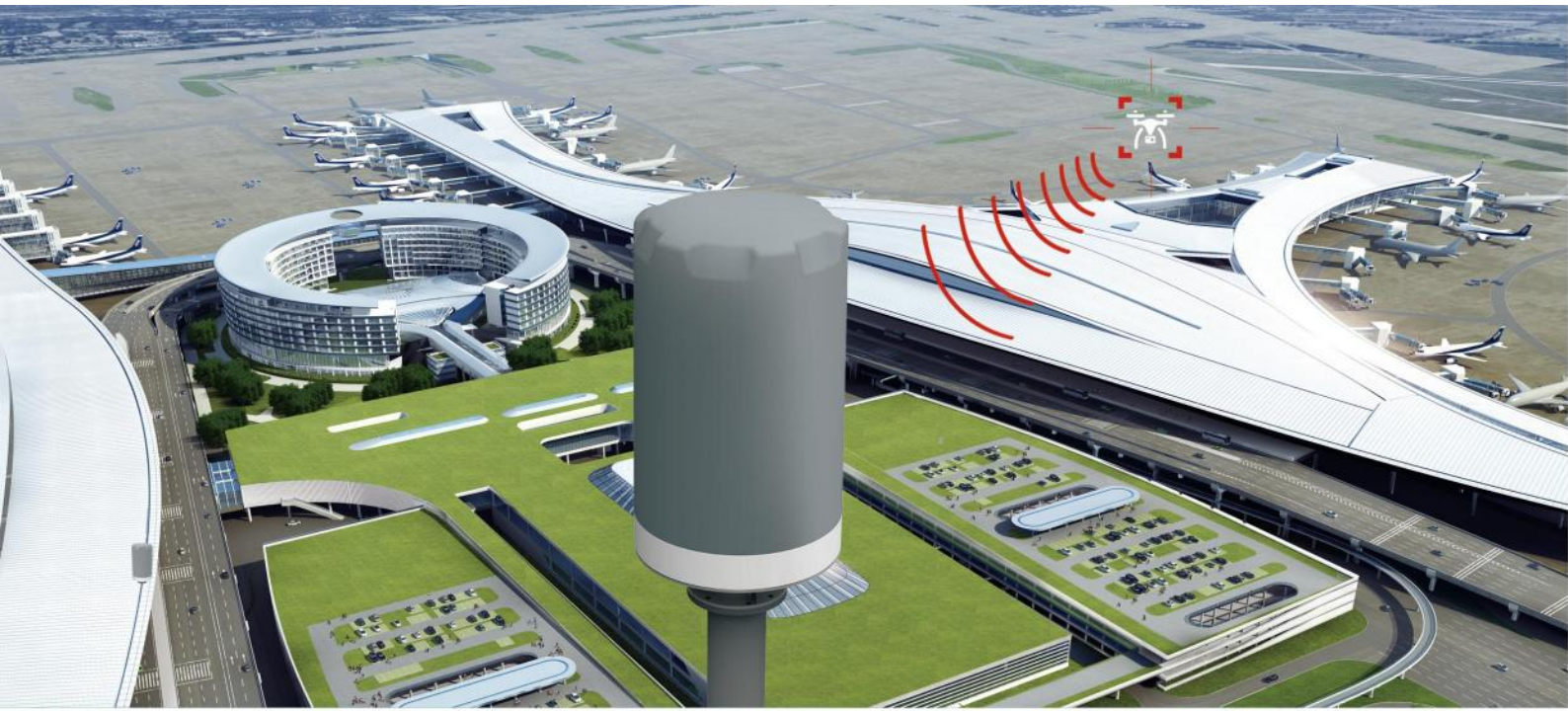
Office park UAV control solution

Smart street light UAV control solution

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System Topology Diagram





BAT-6000 LOW-ALTITUDE UAV DEFENSE SYSTEM

(Positioning detection + video tracking + directional jamming)

SYSTEM OVERVIEW

- ▶ The equipment adopts TDOA radio passive detection technology to accurately locate, detect, track, intelligently identify, and precisely interfere and control consumer-grade drones and operators.
- ▶ It applies to 3D defense of “low-altitude, slow-speed, small” UAV in complex electromagnetic environments in cities, and provides reliable and intelligent technical means and judgment basis for public safety decision-making.
- ▶ As a member of the intelligent unmanned system, it can integrate into the smart IoT through its low-altitude radio sensing capability, and has been assessed by experts from the Ministry of Public Security as leading technology in China.

SYSTEM CHARACTERISTICS

[Ultra-wideband sensing]

It can detect in the ultra-wideband range of 45M-6GHz, with a rich spectrum feature library.

[Passive detection]

No electromagnetic radiation interference, environmentally friendly.

[Leading-level positioning]

20m-level TDOA high-precision positioning provides three-dimensional coordinates for UAV and operators.

[Dynamic trajectory]

High-precision trajectory display is conducive to building warning zones, countermeasure zones, and core zones.

[Visual tracking]

Linked intelligent optoelectronic tracking can provide visual judgment of targets as if targets are in front of the eyes.

[Directional jamming]

Directional electromagnetic interference suppression reduces signal interference in protected areas.

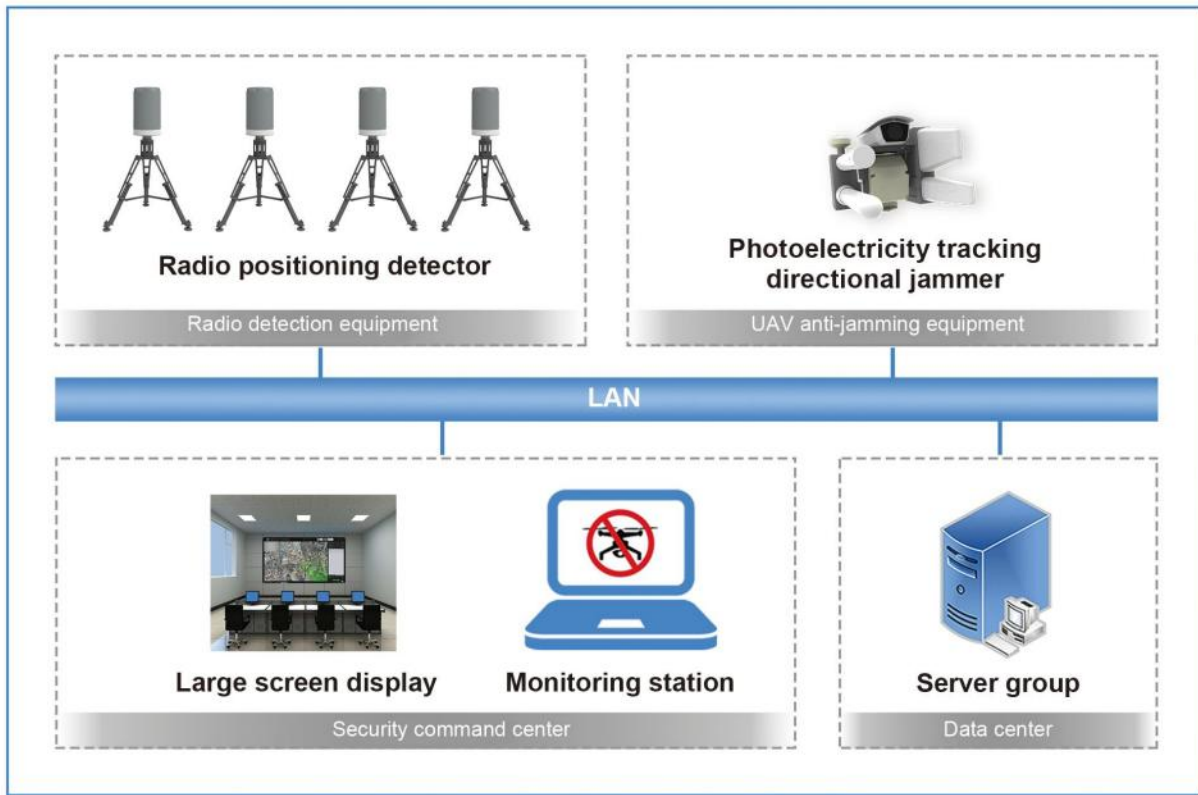
[Unmanned intelligence]

All-weather, all-time, unmanned and unattended, automatic audio and visual alarms and resilience self-healing .

[Information analysis]

Scalable information analysis function, A single device can obtain SN code, speed, altitude, and location information of common models from brands such as DJI, and locate the pilot.

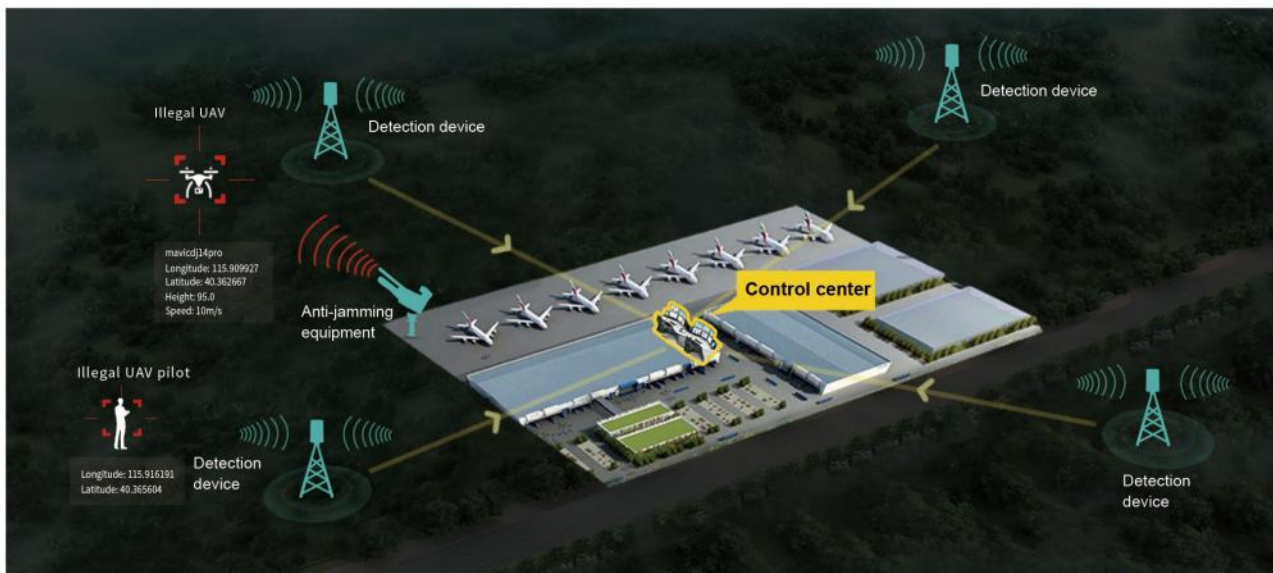
TOPOLOGY DIAGRAM



ADVANTAGEOUS PARAMETERS

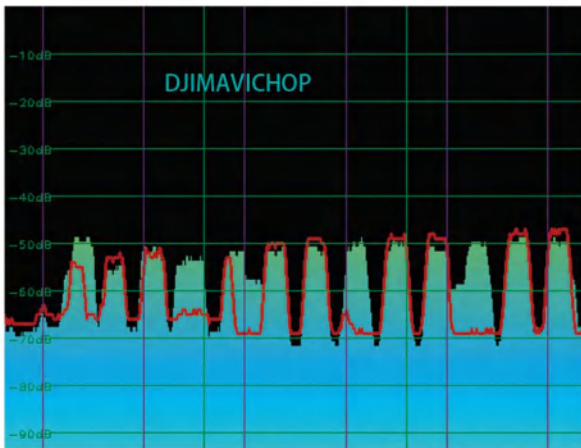
Detection frequency	45MHz~6GHz	Photoelectricity tracking distance	≥1.5km
Detection radius	≥5km, up to 12.4km (depending on conditions)	Direction finding accuracy	≤1° (RMS)
Detection angle	360°	Jamming distance	≥2km
Positioning accuracy	≤20m	Jamming frequency band	900MHz, 2.4G, 5.8G, navigation signal (customizable)
Operator positioning	Available	Black and white list	Available
Analysis positioning accuracy	≤5m	Analysis direction finding accuracy	≤0.2°

DEPLOYMENT INSTRUCTION



BAT-6000 TYPE | ADVANTAGEOUS FUNCTIONS

Ultra-wideband perception



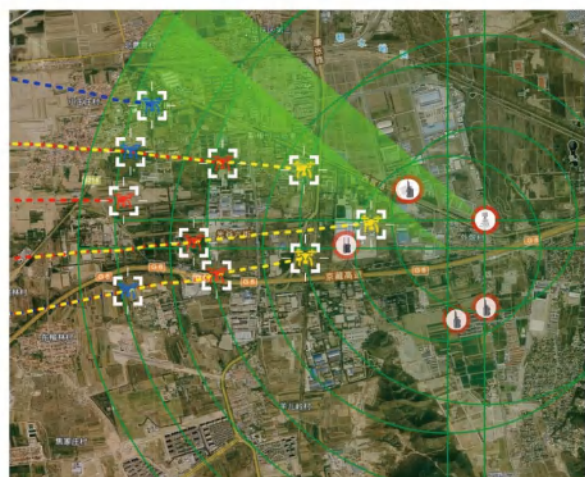
UAV and operator positioning



UAV Model Recognition

名称	频点	角
DJI4_Inspire	2.407	273
Mavic_DJI4PRO	2.450	287
Operator	2.376	0

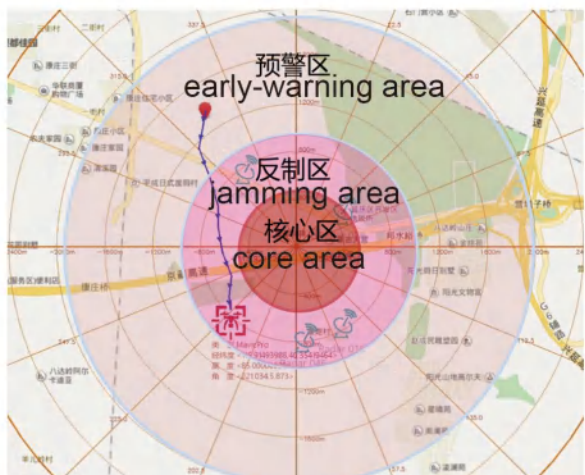
Multiple aircraft dynamic trajectory display



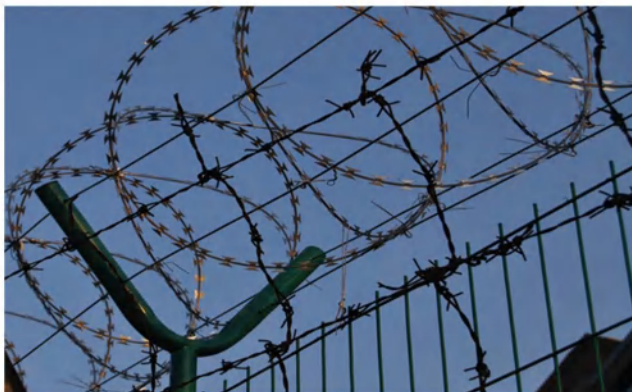
Photoelectricity Tracking



Hierarchical defense zone



APPLICATION SCENARIOS | BAT-6000 TYPE



Scan the code to watch application videos



BAT-5000 LOW-ALTITUDE UAV DEFENSE SYSTEM

(Directional Detection + Position Tracking + Omnidirectional anti-jamming)

SYSTEM OVERVIEW

- ▶ AOA passive detection technology can be used to accurately measure the direction, track the position, and jamming in a 360° all-round manner for low-altitude UAVs;
- ▶ It is suitable for 3D defense of "low-altitude, slow-speed, small" UAV targets in complex urban electromagnetic environments, and can quickly provide all-weather, all-time, all-round technical protection for public safety;
- ▶ With two-station cross positioning, it can integrate into the Internet of Things through low-altitude radio sensing capabilities.

SYSTEM CHARACTERISTICS

[Ultra-wideband sensing]

Ultra-wideband passive sensing, without electromagnetic radiation interference, passivity-based control, green and eco-friendly.

[High-precision direction finding]

High-precision direction finding within 3° can be achieved in a single station.

[Multi-target detection]

Based on high-definition GIS maps, it can simultaneously support multiple target UAV intrusion warning, azimuth indication, target reference distance, etc.

[Quick response, low false alarm rate]

Front-end intelligent processing, high real-time detection, unique signal processing technology, low false alarm rate and low missed alarm rate.

[Multi-band Interference]

It can suppress multi-band interference, cover the majority of UAV signals and provide 360° all-round defense against multiple UAV invasions.

[Multi-station self-organizing network]

Two stations can be used to perform cross-positioning, and four stations can be used to achieve high-precision TDOA positioning and tracking.

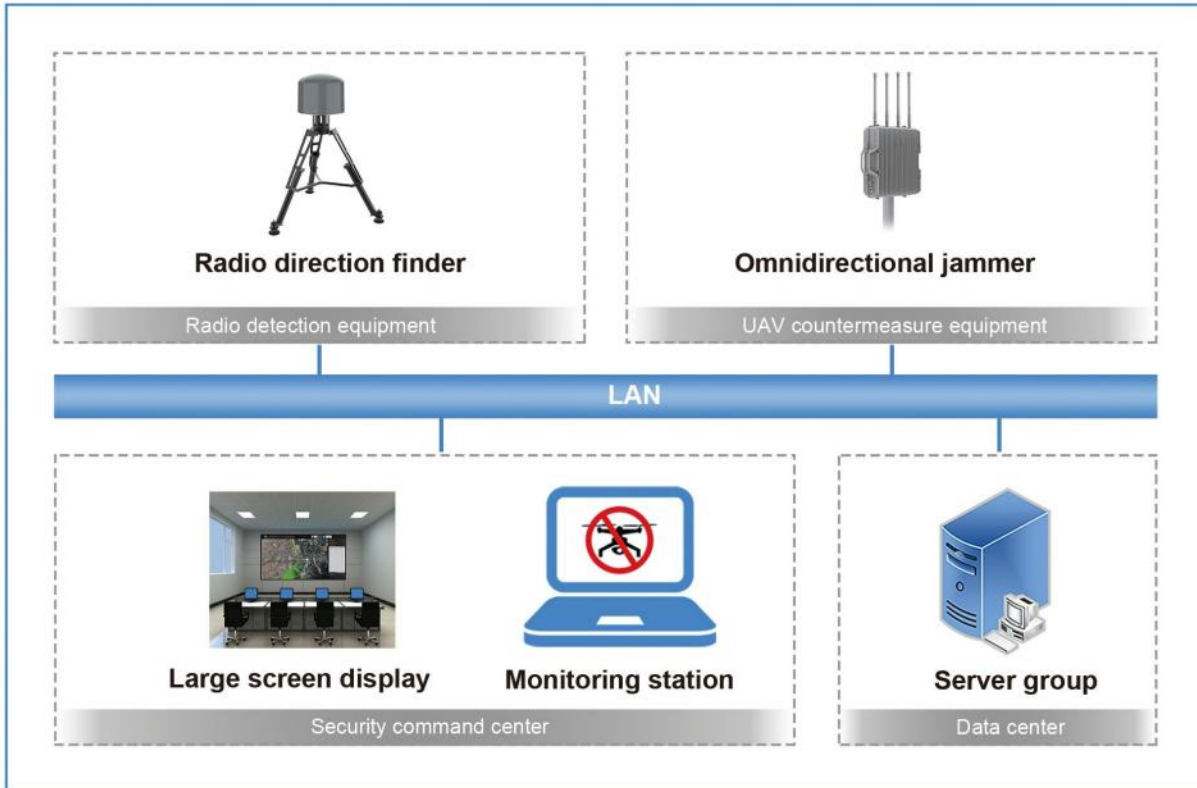
[Unmanned Intelligence]

All-weather, all-time, unmanned, automatic audio and visual alarms and resilient self-healing.

[Information analysis]

Scalable information analysis function, A single device can obtain SN code, speed, altitude, and location information of common models from brands such as DJI, and locate the pilot.

TOPOLOGY DIAGRAM



ADVANTAGEOUS PARAMETERS

Detection range	45M-6GHz	Jamming distance	≥2km
Detection radius	≥5km, up to 12.5km (depending on working conditions)	Jamming frequency band	900MHz, 2.4G, 5.8G, navigation signals (customizable)
Detection angle	Omnidirectional 360°	Single station ranging accuracy	≤10%R
Direction finding accuracy	≤3° (RMS)	Cross positioning	Available
Analysis positioning accuracy	≤5m	Black and white list	Available

APPLICATION SCENARIOS





ANTI-UAV RADIO ACTIVE DEFENSE EQUIPMENT (BAT-2000 TYPE)

(Micropower+Active defense)

SYSTEM OVERVIEW

- ▶ The anti-UAV radio active defense device is specifically developed to counter various security threats posed by illegal UAVs. It infiltrates the illegal UAV navigation system by radiating low-power regenerated satellite signals (power not exceeding 10dBm), thereby achieving interception and control of UAVs that require navigation system for flight control, preventing them from entering protected areas and ensuring low-altitude security in the area. This method is currently the only defense measure that meets the technical requirement of transmitting power $\leq 10\text{mw}$ in anti-terrorism prevention.
- ▶ The system can be expanded to integrate radio detection function, realizing integrated reconnaissance and enticement design. It integrates reconnaissance, striking and enticement and supports standalone operation and network operation and can be used by major anti-terrorism prevention units in industries such as petroleum, petrochemical, electricity, and energy.

SYSTEM CHARACTERISTICS

[Wide applicability]

It has the analog function of BDS-B1, GPS-L1, GLONASS-L1, GALILEO-E1 civil frequency points, and can transmit signals according to specific usage scenarios.

[Low radiation power]

10dBm (10mw), compliant with the radiation standard of the State Radio Regulating Committee (SRRRC), harmless to human body, belongs to non-lethal means, and is unlikely to cause secondary harm.

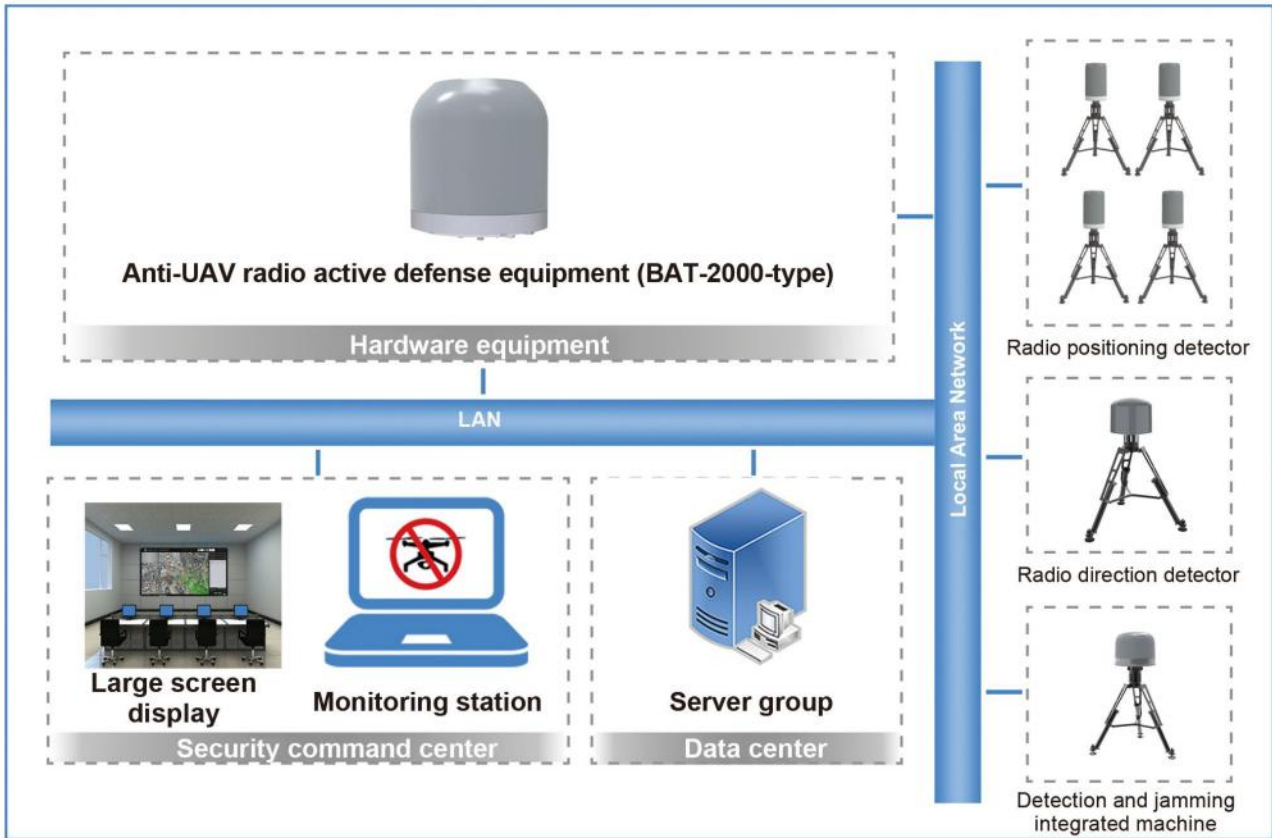
[Flexible solutions]

It can work independently or be guided by radar, TDOA, and other positioning devices to control the UAV to fly to a specific location for targeted guidance; It can also be guided by AOA and other direction-finding devices to repel the UAV in reverse and quickly handle the situation; when combined with radio detection equipment, it can enable area denial and no-fly projection modes to provide reliable protection for designated areas.

[All-day, all-weather, all-round]

It applies to complex electromagnetic and harsh weather conditions and it can work continuously for 7*24h and defense against multiple unmanned aerial vehicle invasions in 360°.

TOPOLOGY DIAGRAM



ADVANTAGEOUS PARAMETERS

Operating Distance	Not less than 500m (without obstruction)	Operating Temperature	-40~70 °C
Operating Frequency Band	Civil UAV navigation frequency band	Storage Temperature	-40~85 °C
Signal Transmission Power	≤10dBm (mW)	Protection Level	IP66
Power Consumption	≤ 30w	Dimensions	300*300*385mm
Power Supply	AC220V		

APPLICATION SCENARIOS



Power system



Oil and petrochemical



Energy companies



ANTI-UAV RADIO ACTIVE DEFENSE EQUIPMENT (BAT-STJ TYPE)

(Radio Detection + Digital Electromagnetic Suppression + Navigation Deception)

SYSTEM OVERVIEW

- ▶ The anti-drone radio active defense equipment integrates radio detection, digital electromagnetic suppression, and navigation deception functions. It features a highly integrated design without the need for external antennas, making it easy to install and implement. The equipment is designed for wide temperature operation and has IP66, allowing it to work during nighttime, heavy fog, and harsh weather conditions. It can operate 24/7 without human supervision.
- ▶ During operation, the device continuously collects real-time radio signals from the surrounding area and scans them according to the configured frequency bands. When a low-altitude UAV target enters the defense area, monitor and identify suspicious link signals; provide target working frequency band, distance, and other information for judgment, evaluation, and early warning by control software; launch digital electromagnetic suppression signals and navigation deception signals according to the plan to implement protection. The device is a fully passive detection system that does not generate any electromagnetic interference to the outside world. It is environmentally friendly and safe, suitable for long-term continuous use. The electromagnetic suppression is designed in a fully digital manner, with precise frequency setting and adjustable power, allowing for controlled usage effects. The navigation deception uses low-power radiation ($\leq 10\text{dBm}$) to regenerate navigation satellite signals, infiltrating the navigation system of the illegal UAV, preventing it from flying into protected areas.
- ▶ This equipment is suitable for low-altitude protection of important areas in fields such as power plants, scenic spots, public security, and judiciary. It can also be used in vehicles. It can be deployed as a stand-alone device for zone detection and protection, or used as a TDOA precise positioning and detection node during networking. It is flexible to use and has ample room for expansion.

SYSTEM CHARACTERISTICS

[High integration of reconnaissance, striking and enticement]

It highly integrates radio detection, digital electromagnetic suppression, and navigation deception. It can be deployed in fixed locations or used in vehicles, and supports high-speed travel.

[Radio passive detection, passivity-based control and environmentally friendly]

It adopts radio passive detection technology, which does not generate any interference to the surrounding electromagnetic environment. It is environmentally friendly, safe, and reliable.

[Navigation deception, low-power countermeasure]

It complies with the national radio management conditions and the Ministry of Industry and Information Technology's Technical Requirements for Low Power Radio Equipment. The power is adjustable to provide non-blind zone protection and can easily cope with cluster saturation attacks.

[Adjustable and controllable digital suppression]

Direction can be selected, and the frequency band and frequency points can be precisely set. The power adjustment dynamically and continuously suppresses frequency bands, allowing for avoidance of co-located devices for different tasks.

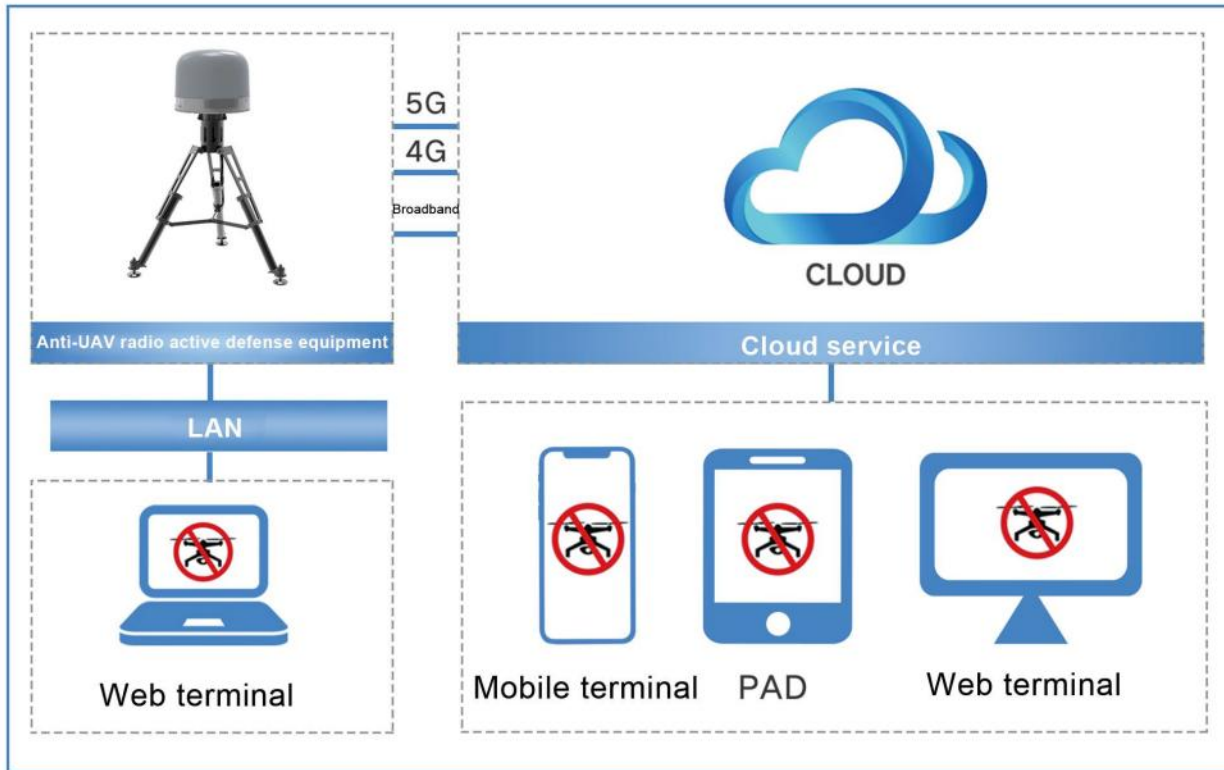
[Multi-target detection, 360° comprehensive defense]

It can simultaneously detect and identify multiple UAV targets, with voice and warning lights providing multidimensional warning prompts, and providing 360° comprehensive defense in the protected area.

[Information analysis]

Scalable information analysis function, A single device can obtain SN code, speed, altitude, and location information of common models from brands such as DJI, and locate the pilot.

TOPOLOGY DIAGRAM



ADVANTAGEOUS PARAMETERS

Detection range	20MHz~6,000MHz	Deception interception distance	1km (typical working condition)
Detection radius	≥4km, up to 7km (depending on conditions)	Deception signal power	<10dBm (10mW)
Receiving sensitivity	≤-110dBm	Deception signal type	GPS (L1), GLONASS (L1)
Scanning range	360°		Optional BDS (B1), Galileo (E1)
Connection method	Network Connection (RJ45)	Interference frequency band	0.8G, 0.9G, 1.6G
Operating temperature	-40 °C -70 °C		2.4G, 5.2G, 5.8G
Protection level	IP66	Control radius	500~1,000m

APPLICATION SCENARIOS



Public security and judicial



Electric power



Industrial facilities



ANTI-UAV RADIO ACTIVE DEFENSE EQUIPMENT (BAT-ST TYPE) (Radio Detection + Navigation Deception)

SYSTEM OVERVIEW

- ▶ The anti-UAV radio active defense equipment integrates radio detection and navigation deception functions, with a highly integrated design that does not require external power boxes or antennas, making it easy to install and implement. The equipment operates in a wide temperature range and has IP66-level protection, allowing it to work during nighttime, dense fog, and harsh weather conditions, and can operate 24/7 without human supervision.
- ▶ When the equipment is operating, it collects real-time wireless signals from the surrounding area and scans the configured frequency bands. When a low-altitude UAV target enters the defense area, it monitors and identifies suspicious link signals, provides information such as the target's operating frequency band and distance, and controls software to make judgments, evaluations, and warnings. It then launches navigation deception signals according to the plan to implement protection. The equipment is fully passive and does not generate any electromagnetic interference to the outside world, ensuring green safety and suitability for long-term continuous use; The countermeasure principle is to radiate ultra-low power ($\leq 10\text{dBm}$) regenerated navigation satellite signals to intrude the illegal UAV navigation system, preventing them from flying into the protected area and ensuring the safety of low-altitude areas. It can be used normally in petrochemical and other hazardous areas.
- ▶ This equipment is suitable for low-altitude protection of important areas in power plants, oil and petrochemical industries, public security and judicial fields. It can be deployed as a single device to complete the detection and protection of the defense zone, or it can be used as a TDOA precise positioning detection node during network deployment. It is flexible to use and has ample room for expansion and improvement.

SYSTEM CHARACTERISTICS

[High integration of reconnaissance and enticement]

Highly integrated wireless radio detection and navigation deception. Easy installation and deployment and flexible usage.

[Radio passive detection, passivity-based control and environmentally friendly]

It adopts radio passive detection technology, which does not generate any interference to the surrounding electromagnetic environment. It is environmentally friendly, safe, and reliable.

[Navigation Deception, Low Power Countermeasure]

It complies with the national radio management conditions and the Ministry of Industry and Information Technology's Technical Requirements for Low Power (Radio Equipment), with adjustable power to easily cope with cluster saturation attacks.

[Multi-target detection, 360° comprehensive defense]

It can simultaneously detect and identify multiple UAV targets, with voice and warning lights providing multidimensional warning prompts, and providing 360° comprehensive defense in the protected area.

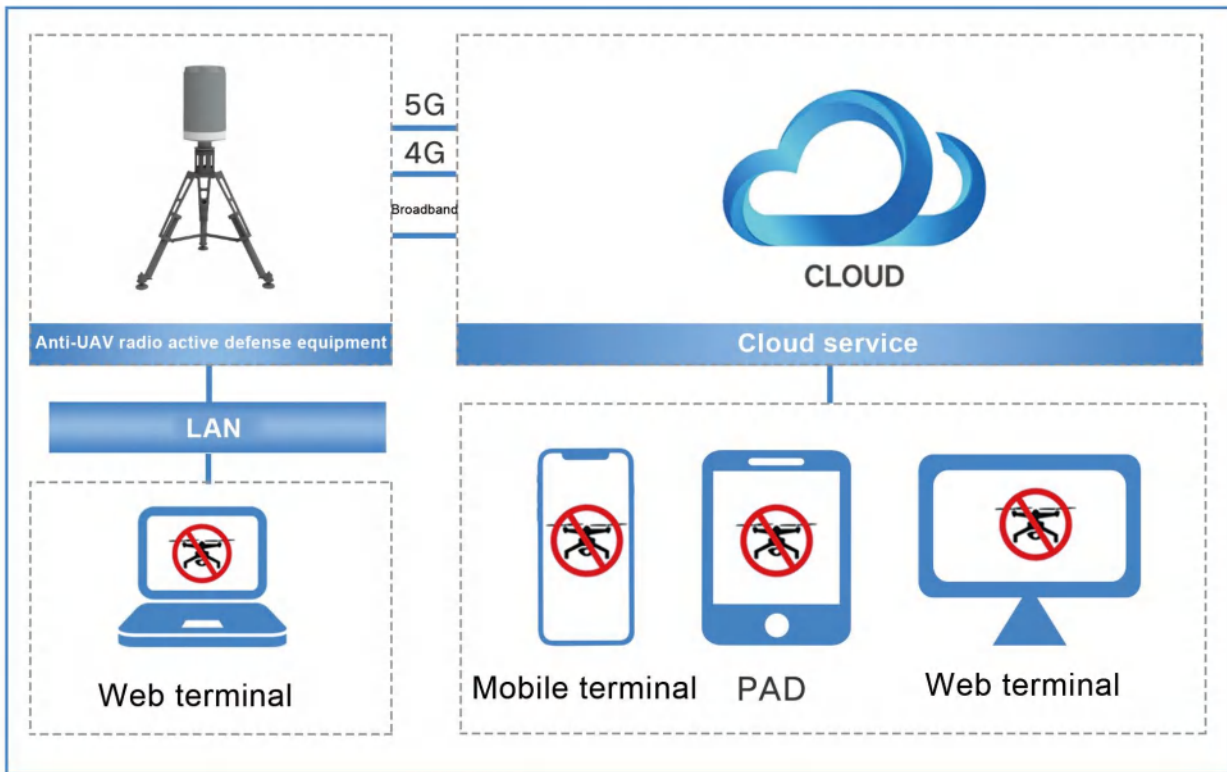
[Grid Deployment, Multi-level Monitoring]

It supports flexible networking and deployment of multiple systems, covering large areas at the urban level, and monitoring at the provincial, municipal, and district levels.

[Information analysis]

Scalable information analysis function, A single device can obtain SN code, speed, altitude, and location information of common models from brands such as DJI, and locate the pilot.

TOPOLOGY DIAGRAM



ADVANTAGEOUS PARAMETERS

Detection Range	20MHz~6,000MHz	Deception Signal Power	<10dBm (10mW)
Detection Radius	≥5km, up to 10km (depending on conditions)	Deception Signal Type	GPS (L1), GLONASS (L1)
Reception Sensitivity	≤-110dBm		Optional BDS (B1), Galileo (E1)
Scanning Range	360°	Control Radius	500~ 1,000m
Connection Method	Network Connection (RJ45)	Operating Temperature	-40°C~ 70°C
Protection Level	IP66	Power Supply Method	AC220V

APPLICATION SCENARIOS



Oil and gas field



Electric power



Key area



BAT-SCANNER-DM PORTABLE RADIO POSITIONING DETECTOR

(Precise positioning+Blacklist and whitelist+Deployment in seconds)

SYSTEM OVERVIEW

- ▶ When BAT-Scanner-DM portable radio positioning detector is operating, it collects surrounding radio signals in real time and scans them according to the configured frequency band. When a low-altitude UAV target enters the defense area, it will monitor and identify suspicious link signals to obtain information such as the target's operating frequency band and distance. The device can not only detect UAVs but also identify the model, serial number, longitude, latitude, altitude, pilot position, and return point location of the UAV. The device has a fully passive detection, which does not generate any electromagnetic interference to the outside world. It is environmentally-friendly and safe, suitable for long-term continuous use.
- ▶ This device is suitable for guard tasks, public security patrols, special operations counter-terrorism, and major event security. It is also suitable for low-altitude security in border defense, military camps, power and petrochemical parks, and other scenarios. It has a built-in 4G communication module which can work offline as a standalone device, and can be flexibly and quickly deployed with agile response. It can also be connected to a control and command platform in real-time to meet various scenario needs.

SYSTEM CHARACTERISTICS

[Highly integrated, standalone system]

It integrates functions of radio detection, link analysis, operation display, and 4G communication. A single device can achieve real-time detection of UAV targets within a 360° range. It can simultaneously detect and identify multiple UAV targets, provide multi-dimensional warning prompts in terms of voice and image, and provide all-round defense for the area.

[Passive detection, multiple models]

The detection part is provided with radio passive detection technology, which does not generate any interference to the surrounding electromagnetic environment, green and environmentally friendly, safe and reliable. It supports detection of DIY models of all series of DJI, XIRO, and most other wireless transmission systems.

[Wide coverage, time difference positioning during network deployment]

The coverage range can reach 10km, supporting 4G/5G mobile communication, WAN, LAN. Multiple devices can wirelessly self-organize into a network and transmit data to the server in real-time. Three or more devices can be deployed to support TDOA precise positioning of UAV and pilot positions (all models), trajectory tracking, and precise countermeasures guidance.

[Friend-foe identification, blacklist and whitelist]

Through the use of blacklist and whitelist technology, friend-foe identification is achieved. Only detection and recording are performed on our own UAVs without triggering any alerts. Based on link analysis and identifiable unique series numbers of UAVs, it is possible to differentiate between different UAVs of the same model, serving as the basis for confirming UAV ownership.

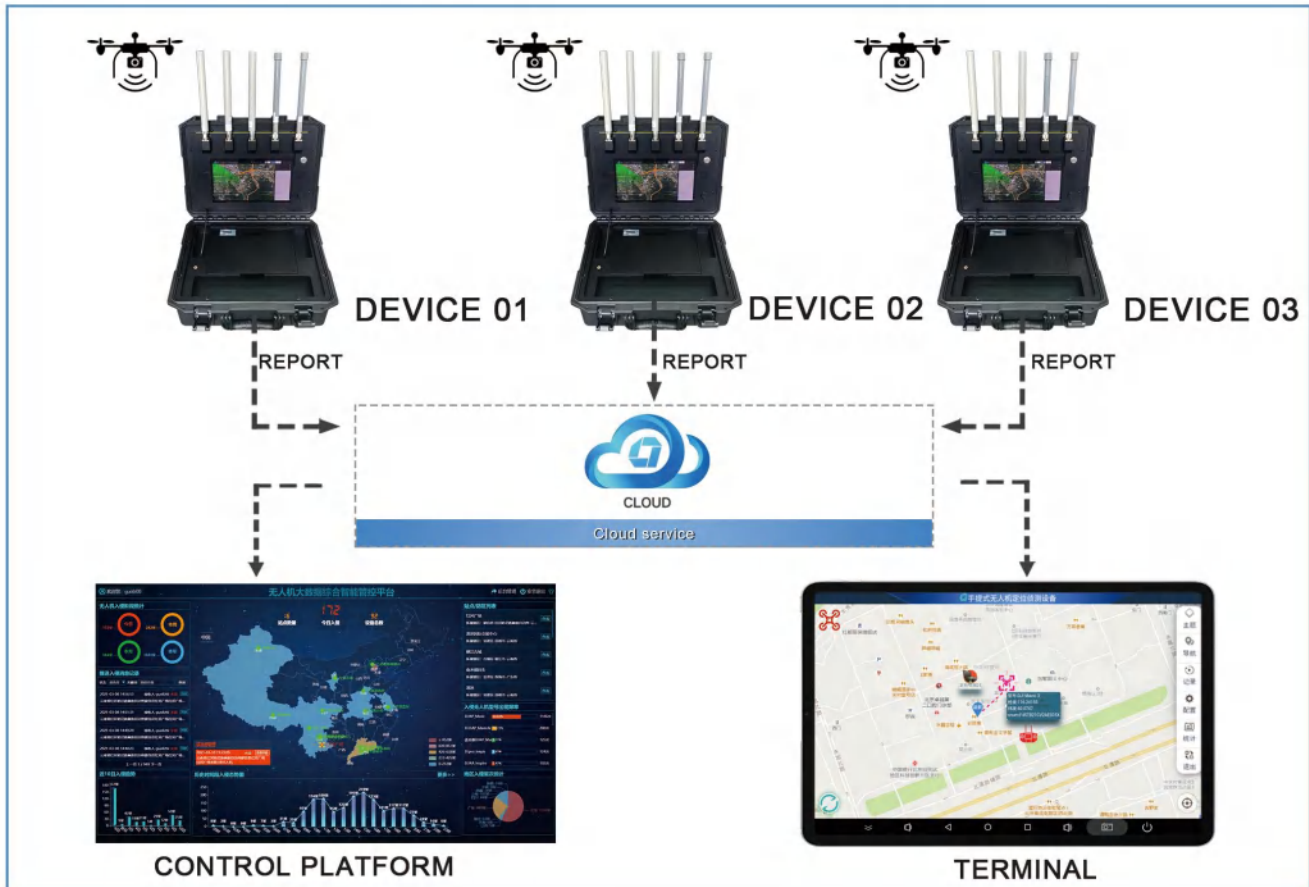
[Accurate positioning, operator identification]

DJI models and some models of brands such as Daotong support decoding the information in the radio messages to extract information such as UAV model (SN code), geographic location of remote control, geographic location of return point, current UAV location, flight speed, flight altitude, etc. It can locate the pilot's position information and display real-time pilot position, direction information, and distance information.

[Unmanned, continuous operation]

User-friendly human-machine interaction, simple operation. It can also be unmanned according to the plan and easily guard low-altitude safety. It has targeted embedded low-power design and built-in large-capacity and highly reliable battery pack and can be used for more than 20 hours continuously if it is fully charged, supporting simultaneous charging and use.

TOPOLOGY DIAGRAM



ADVANTAGEOUS PARAMETERS

Detection frequency range	20MHz-6,000MHz	Number of multi-target detections	≥40
Detection radius	≥8KM	Black and white list	Support
Detection angle	Horizontal 360°, vertical -90°~+90°	Working time	≥20 hours
Detection altitude	Should reach 500M	Working temperature	-10°C~+50°C
Target positioning	DJI series such as Mavic, Air, Mini, FPV, Avata, etc.	Protection level	IP66 level
Positioning accuracy	≤5m	Device weight	15kg

APPLICATION SCENARIOS



Event security



Major events



Border security



Chemical industrial park



ANTI-UAV RADIO ACTIVE DEFENSE EQUIPMENT (BAT-2000-GE-TYPE)

(Low-power+Active defense+High mobility)

SYSTEM OVERVIEW

- ▶ The anti-UAV radio active defense equipment is specifically developed to counter various security threats posed by illegal UAVs. By radiating low-power regenerated navigation satellite signals (with a power not exceeding 10dBm), it infiltrates the illegal UAV's navigation system, thereby achieving interception and control of UAVs that require the use of the navigation system for flight control, preventing them from flying into protected areas. This technology is currently the only defense measure that meets the technical requirement of emission power $\leq 10\text{mw}$ in anti-terrorism prevention. The system has high mobility and can be quickly and easily deployed in temporary protected areas to ensure the low-altitude security of the area.
- ▶ The device can work alone with good portability and mobility. It can be used by major anti-terrorism prevention units in industries such as petroleum, petrochemical, electricity, and energy by virtue of its portability and good maneuverability.

SYSTEM CHARACTERISTICS

[Wide applicability]

It has the analog function of BDS-B1, GPS-L1, GLONASS-L1, GALILEO-E1 civil frequency points, and can transmit signals according to specific usage scenarios.

[Low radiation power]

10dBm (10mw), compliant with the radiation standard of the State Radio Regulating Committee (SRRRC), harmless to human body, belongs to non-lethal means, and is unlikely to cause secondary harm.

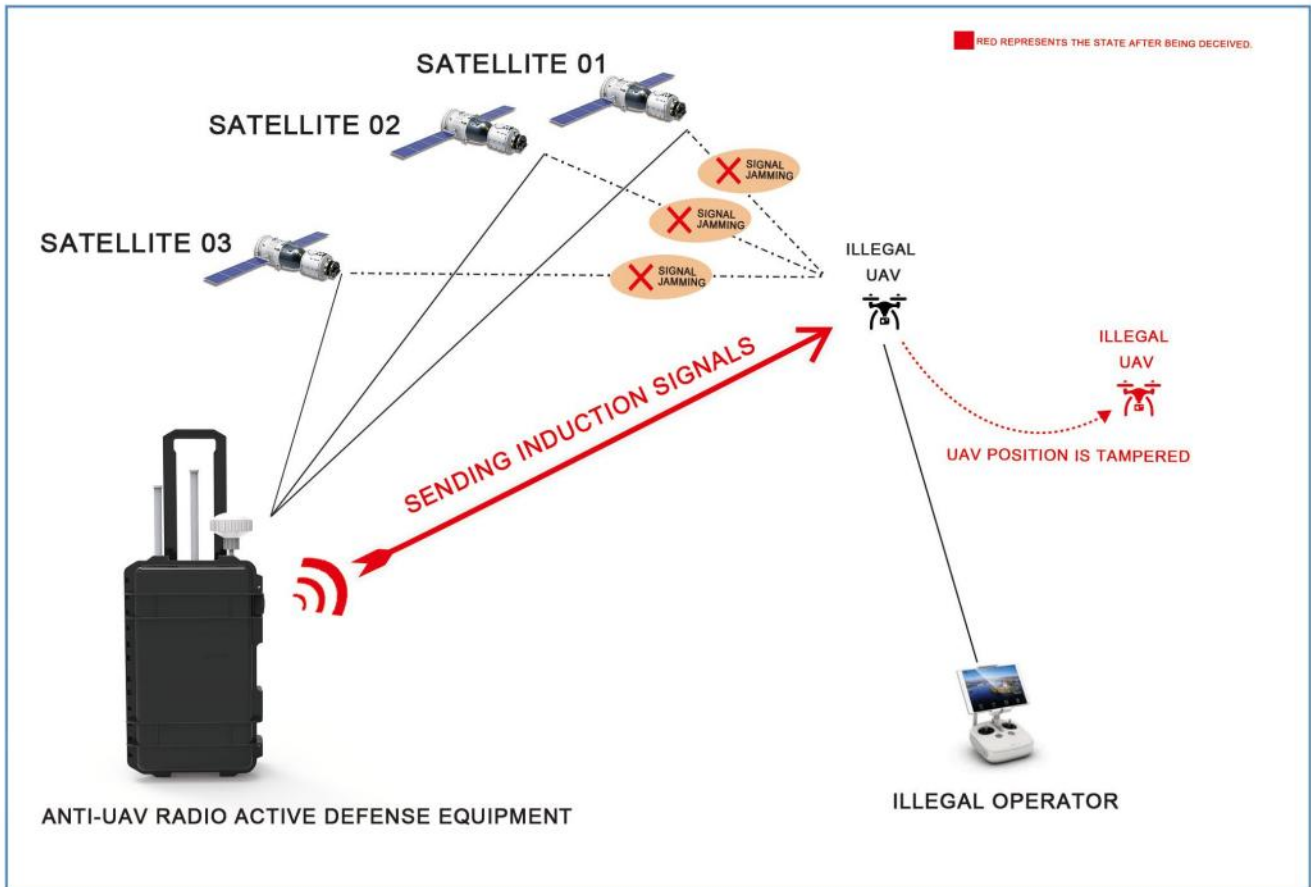
[Flexible solutions]

It can work independently or be guided by radar, TDOA, and other positioning devices to control the UAV to fly to a specific location for targeted guidance; It can also be guided by AOA and other direction-finding devices to repel the UAV in reverse and quickly handle the situation; When combined with radio detection equipment, it can enable area denial and no-fly projection modes to provide reliable protection for designated areas.

[All-day, all-weather, all-round]

It applies to complex electromagnetic and harsh weather conditions and it can work continuously for 7*24h and defense against multiple unmanned aerial vehicle invasions in 360°.

WORKING DIAGRAM



ADVANTAGEOUS PARAMETERS

Operating Distance	Not less than 500m (without obstruction)	Operating Temperature	-40~70 °C
Operating Frequency Band	Civil UAV navigation frequency band	Storage Temperature	-40~85 °C
Signal Transmission Power	≤10dBm (mW)	Protection Level	IP66
Power Consumption	≤30w	size	350*230*570mm
Power Supply	Built-in battery / AC220V		

APPLICATION SCENARIOS



Power system



Oil and petrochemical



Event security



BAT-H1030 PORTABLE UAV EQUIPMENT FOR DETECTION, JAMMING, AND NAVIGATION DECEPTION

(Integrated detection, Jamming and navigation deception+Work alone+Networking)

SYSTEM OVERVIEW

- ▶ The BAT-H1030 portable UAV detection, jamming and deception integrated equipment combines six electrical detection algorithms, eight frequency band electromagnetic jamming, and four-mode navigation and deception, offering a highly integrated design. This single unit enables the full process control of unmanned aerial vehicle detection, striking, and deception.
- ▶ During operation, the equipment identifies and decodes illegal UAVs through radio frequency scanning features. Multiple electrical detection algorithms allow for presence detection, direction finding, human-machine positioning, ID recognition, image parsing, and support for multi-network TDOA positioning; Employing eight-band electromagnetic suppression technology, it blocks drone control and transmission links as well as navigation signals, forcing drones to return or land; Utilizing four-mode navigation deception technology, it emits false satellite navigation signals to infiltrate the drone's system, thus prohibiting, denying, or repelling drones.
- ▶ Equipped with passive detection capabilities and excellent concealment; Its desensitized design effectively prevents exploitation by public opinion; The equipment can be handheld, backpackable, tripod-mounted, or installed on a vehicle's roof, catering to various usage scenarios; Its 10.1" anti-glare touchscreen supports maps, coordinates, blacklists, and logs, offers a wealth of visual content and is straightforward to operate, making it particularly suitable for public security special missions, counter-terrorism and drug control operations, security patrols, border inspections, as well as individual/team/convoy missions, temporary positions, and major events.

SYSTEM CHARACTERISTICS

[Detection alarm]

The omnidirectional antenna receives real-time drone remote control signals or image transmission signals, identifies and detects illegal intrusions of drones through radio spectrum features, and provides information such as drone models, frequency points, bandwidth, and sound and light alarms.

[Direction finding detection]

After omnidirectional detection alarm, handheld equipment can rotate slowly and use directional antennas to receive drone remote control signals or image transmission signals. Based on the strength of the received radio signal, the drone's orientation can be determined, and information such as drone model, frequency, and orientation can be provided.

[Location Detection]

By using protocol parsing technology, precise identification and positioning of some drones from brands such as DJI can be achieved. By using ID recognition technology, drone broadcast information can be identified, and both technologies can provide drone models SN code, drone longitude, latitude, altitude, return point information, and position information of the pilot.

[ID identification, FPV Image Analysis]

Capable of receiving drone broadcast signals and identifying information such as drone model, frequency, position, and pilot position; Detect and identify FPV traversers, and be able to obtain FPV first view images.

[Precision jamming]

By transmitting eight band interference signals, the remote control signal, image transmission signal, or satellite navigation signal between the drone and the remote control are blocked, forcing the drone to return or land.

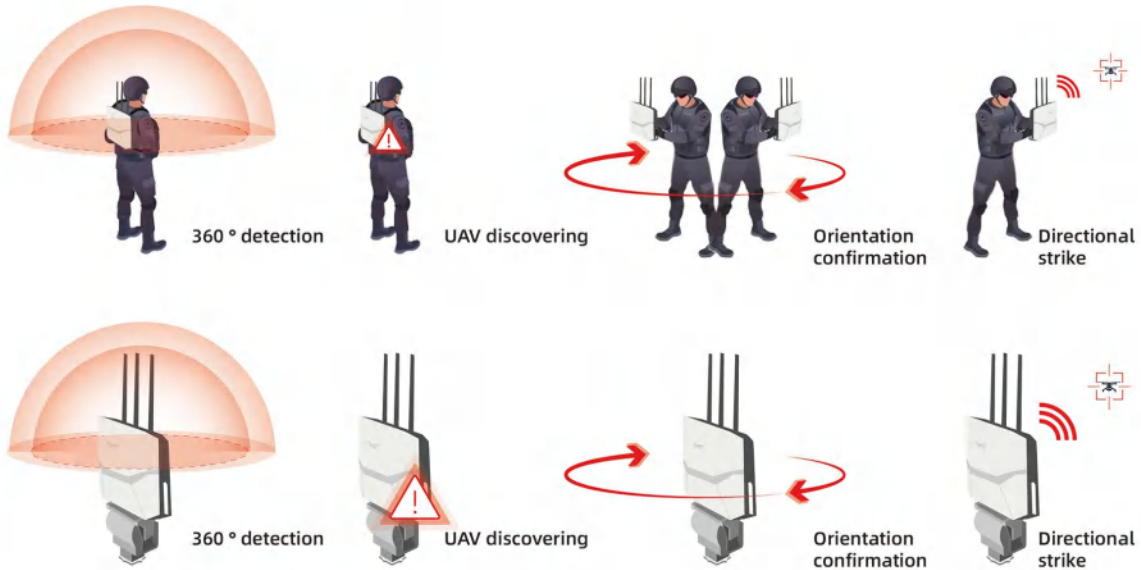
[TDOA positioning]

Multi station networking forms a TDOA high-precision positioning system, achieving high-precision positioning of drones and pilots.

[Navigation deception (optional)]

By launching four false satellite navigation signals to invade the unmanned aerial vehicle navigation system, unmanned aerial vehicles can be prohibited from flying, blocked in areas, and directionally driven away.

APPLICATION METHOD



ADVANTAGEOUS PARAMETERS

Detection frequency	20MHZ~6GHZ	Interference frequency band	800MHZ~6GHZ 8-band
Detection distance	>500m~5km	Interference capability	Forced landing and return flight
Detection angle	360°	Interference distance	Remote control power 30dBm, C/I>1:1
positioning accuracy	TDOA≤20m, Analysis≤5m	Interference angle	≥ 30°
Analyzing Information	Drone model SN code, longitude Latitude, altitude, return point and the position information of the pilot	Deception signal system	GPS、 GALILEO、 GLONASS、 BD
		Deception ability	No flight, denial, and expulsion
		Deception control radius	500m-1000m (adjustable)
Equipment size	363.2x325.95x95.59mm (excluding antenna)	Earphone socket	3.5mm
Equipment weight	≤8kg	Support network	4G/5G/LAN
Protection level	IP65	Power supply method	AC 220V/battery
working temperature	-25°C~55°C	Standby time	4h
Alarm method	Sound and light alarms (adjustable), external headphones (silent)		

APPLICATION SCENARIOS



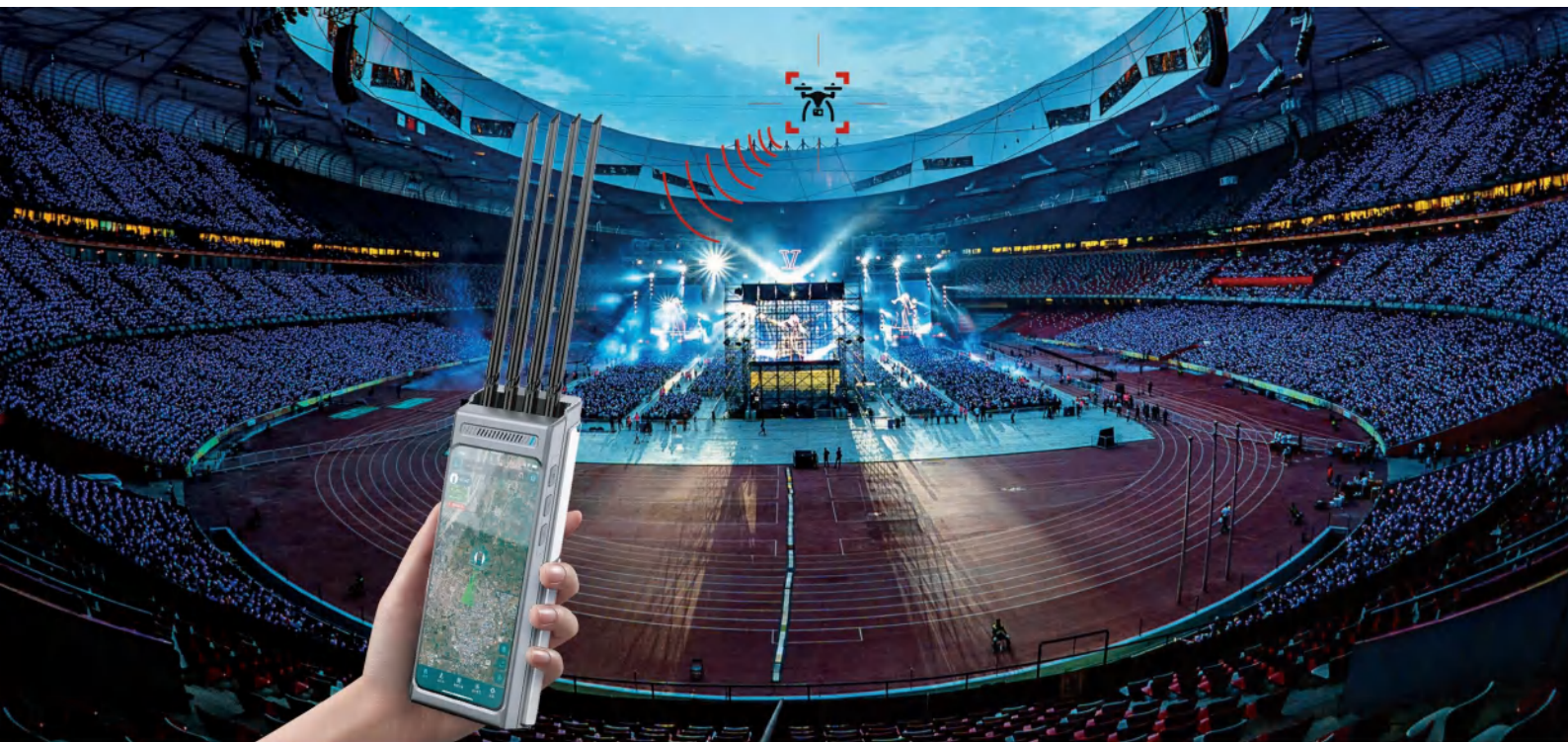
Event security



Major competitions



Border defense



BAT-H1050 HANDHELD UAV DETECTION AND GUIDANCE INTEGRATED EQUIPMENT

(Integrated detection and navigation deception+Networking work)

SYSTEM OVERVIEW

- ▶ The BAT-H1050 handheld UAVs detection and deception integrated equipment combines six electrical detection algorithms and four navigational deception techniques in a highly integrated design. This single unit oversees the entire process of detecting and deceptively managing UAVs.
- ▶ During operation, the equipment identifies and decodes the radio frequency scanning features of illegal drones. Multiple algorithms enable presence detection, direction finding, human-to-aircraft positioning, ID recognition, image analysis, and support for TDOA positioning through a multi-unit network. Employing four-mode navigational deception technology, it emits false satellite navigation signals to disrupt the drone's navigation, leading to their prohibition, denial, or repulsion.
- ▶ Equipped with passive detection capabilities for excellent concealment; The equipment can be handheld or mounted on a stand, catering to various scenarios; Its 6.39" anti-glare touchscreen supports maps, coordinates, blacklists, and logs, offering a wealth of visual content and simple operation. It is particularly suitable for public security special missions, counter-terrorism and drug control operations, security patrols, border surveillance, as well as individual/team/convoy missions, temporary positions, and major events.

SYSTEM CHARACTERISTICS

[Detect alarms]

The omnidirectional antenna receives real-time drone remote control signals or image transmission signals, identifies and detects illegal intrusions of drones through radio spectrum features, and provides information such as drone models, frequency points, bandwidth, and sound and light alarms.

[Direction detection]

After the omnidirectional detection alarm, an external directional antenna can rotate slowly to receive drone remote control signals or image transmission signals. Based on the strength of the received radio signal, the drone's orientation can be determined, providing information such as drone model, frequency, and orientation.

[Positioning detection]

Using protocol parsing technology, precise identification and positioning of drones from brands like DJI can be achieved. Using ID recognition technology, drone broadcast information can be identified. Both technologies can provide information such as drone models, SN codes, longitude, latitude, altitude, return point information, and the position of the pilot.

[ID recognition, FPV image analysis]

Capable of receiving drone broadcast signals and identifying information such as drone model, frequency, position, and pilot position; Detect and identify FPV traversers, and be able to obtain FPV first view images.

[TDOA positioning]

Multi station networking forms a TDOA high-precision positioning system, achieving high-precision positioning of drones and pilots.

[Navigation deception (optional)]

By launching four false satellite navigation signals to invade the unmanned aerial vehicle navigation system, unmanned aerial vehicles can be prohibited from flying, blocked in areas, and directionally driven away.

[Multi type fusion networking]

The equipment supports 4G communication and network interfaces, and can be networked with detection equipment of the same or different models to achieve TDOA, supporting centralized control.

APPLICATION METHOD

Fixed bracket



Handheld



ADVANTAGEOUS PARAMETERS

Detection frequency	20MHz~6GHz	Deception signal system	GPS、 GALILEO、 GLONASS、 BD
Detection distance	> 500m~3km	Deception ability	No flight, denial, and expulsion
Detection angle	360 °	Deception control radius	500m-1000m (adjustable)
positioning accuracy	TDOA≤20m, Analysis ≤ 5m	working temperature	-25 °C~55 °C
Analyzing Information	Drone model SN code, longitude Latitude, altitude, return point and the position information of the pilot	Alarm method	Sound and light alarms (adjustable), external headphones (silent)
Equipment size	82.8x206.3x35.9mm (excluding antenna)	earphone socket	3.5mm
Equipment weight	≤ 1kg	Support network	4G/5G/LAN
Protection level	IP65	Power supply method	AC 220V/battery
		Standby time	4h

APPLICATION SCENARIOS



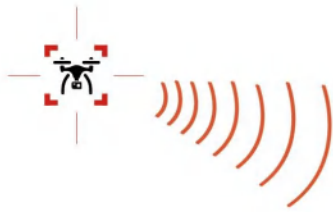
Event security



Major competitions



Border defense



BAT-5060 VEHICLE-MOUNTED LOW-ALTITUDE UAV DEFENSE SYSTEM INTEGRATING DETECTION, JAMMING AND NAVIGATION DECEPTION

(Vehicle-mounted+Concealed+Wide collection+High sampling)

SYSTEM OVERVIEW

- ▶ The BAT-5060 vehicle mounted UAVs defense equipment includes four major functional components: precise direction finding, digital sector suppression, navigation deception, and target analysis and positioning. Supporting precise detection and countermeasures for high-speed driving, supporting long-term parking guarantee, and optimizing and enhancing the countermeasures unit for vehicle scenarios, with excellent performance. A single vehicle can achieve detection and countermeasures within a radius of 5km, and can easily complete accompanying support. Especially suitable for military restricted areas, visits of political figures, major events, and border patrols.
- ▶ The BAT-5060 vehicle mounted surveillance and decoy integrated drone defense equipment uses radio frequency scanning feature recognition and decoding to detect, direction finding, and track illegal invading drones. It can implement directional/omnidirectional electromagnetic interference suppression, block the remote control/image transmission/navigation links of invading drones, force drones to land or return, and implement navigation deception, transmitting false address information to invade the drone navigation system, making it unable to fly into protected areas. Supports both single machine and network operation, with high equipment integration and integrated design, capable of continuous operation in nighttime, dense fog, and harsh weather conditions.

SYSTEM CHARACTERISTICS

[Integrating detection, jamming and deception]

It is highly integrated and designed specifically for car use, with easy disassembly and good concealment.

[Multi band precise direction finding, ultra wideband coverage]

Supports ultra wide frequency range detection from 20MHz to 6GHz, achieving high-precision direction finding within 3 ° with a single station, and covering a range of up to 10km (depending on operating conditions).

[Ultra wide spectrum design, wide spectrum feature library]

Suitable for complex electromagnetic environments on the battlefield, equipped with low false alarm and false alarm rates, and strong recognition capabilities.

[Supported for use while driving]

Can be used in driving, achieving agile detection, rapid attack and deception, and real-time angle calibration.

[Multidirectional interference, on-demand use]

Single machine intrusion can achieve targeted interference in corresponding sectors; Multi aircraft and multi-directional drone intrusion, using multi-directional precision jamming; Can interfere with all sectors simultaneously, achieving 360 ° omnidirectional jamming.

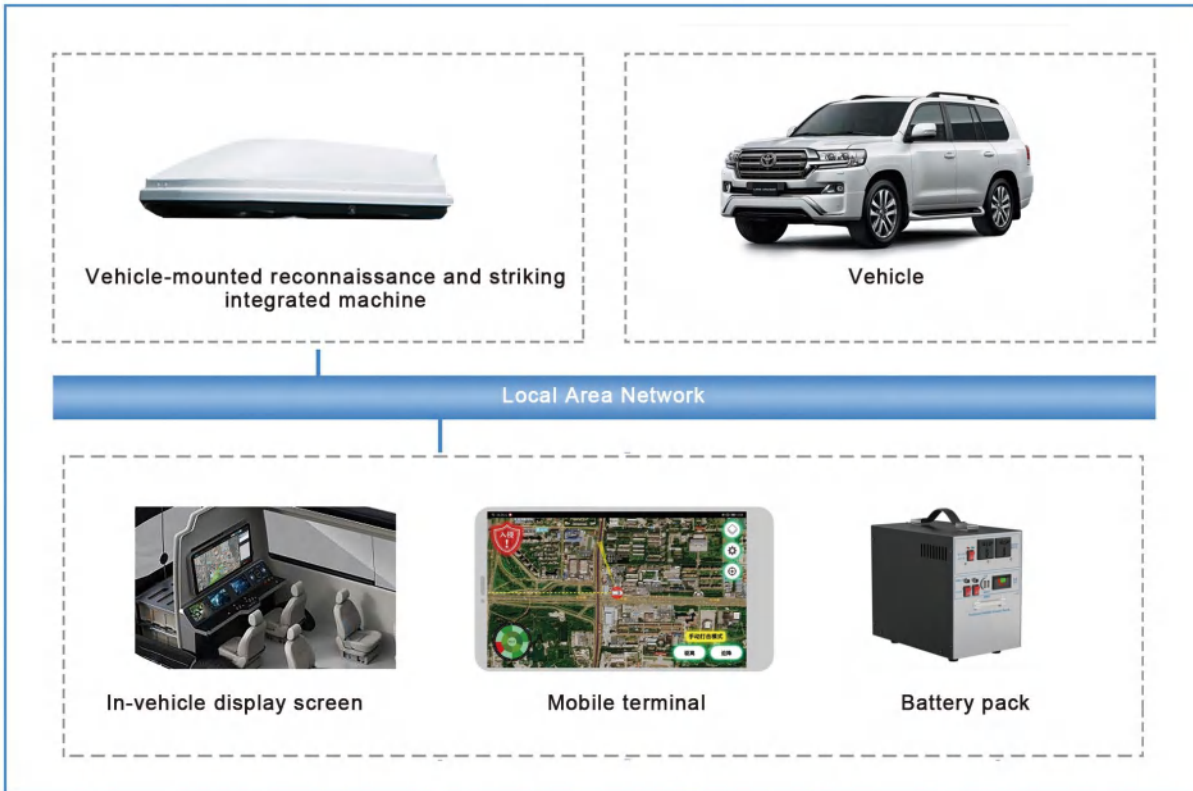
[Supports multiple power sources]

Supports oil engine power supply and AC 220V mains power supply; Exclusive battery box design, supporting outdoor continuous detection time of no less than 8 hours and cumulative strike time of no less than 4 hours.

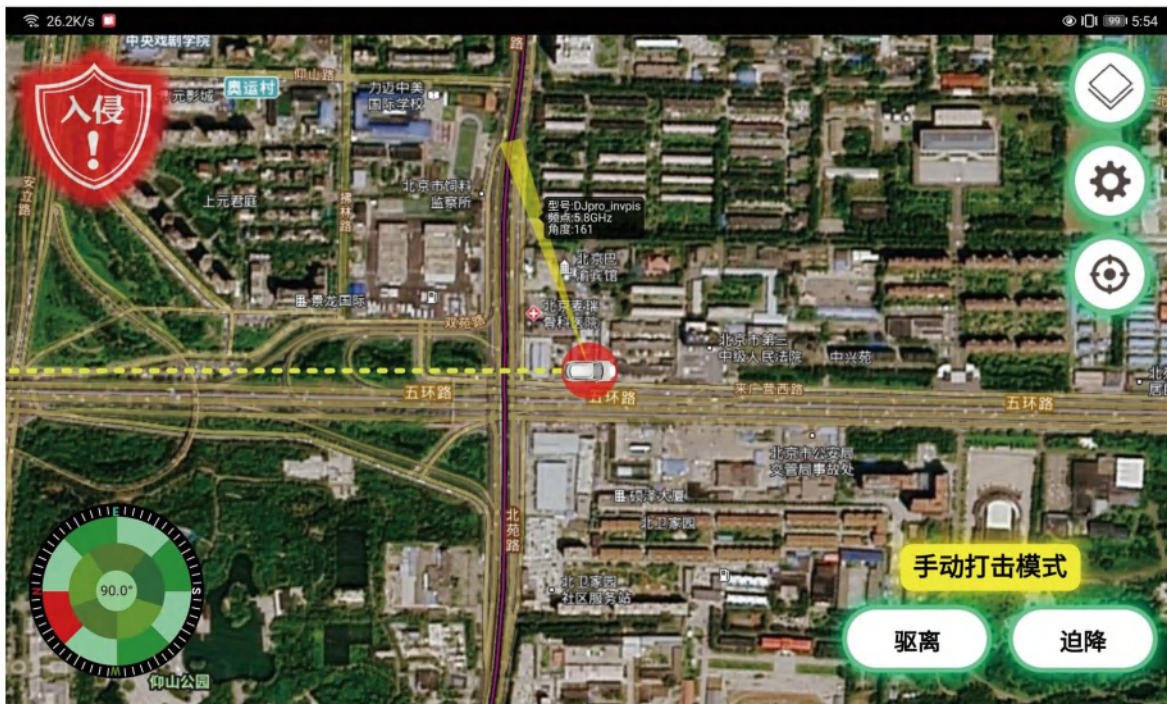
[Autonomous operation, unmanned]

Optional autonomous operation mode, automatic warning without intervention, and disposal according to the plan.

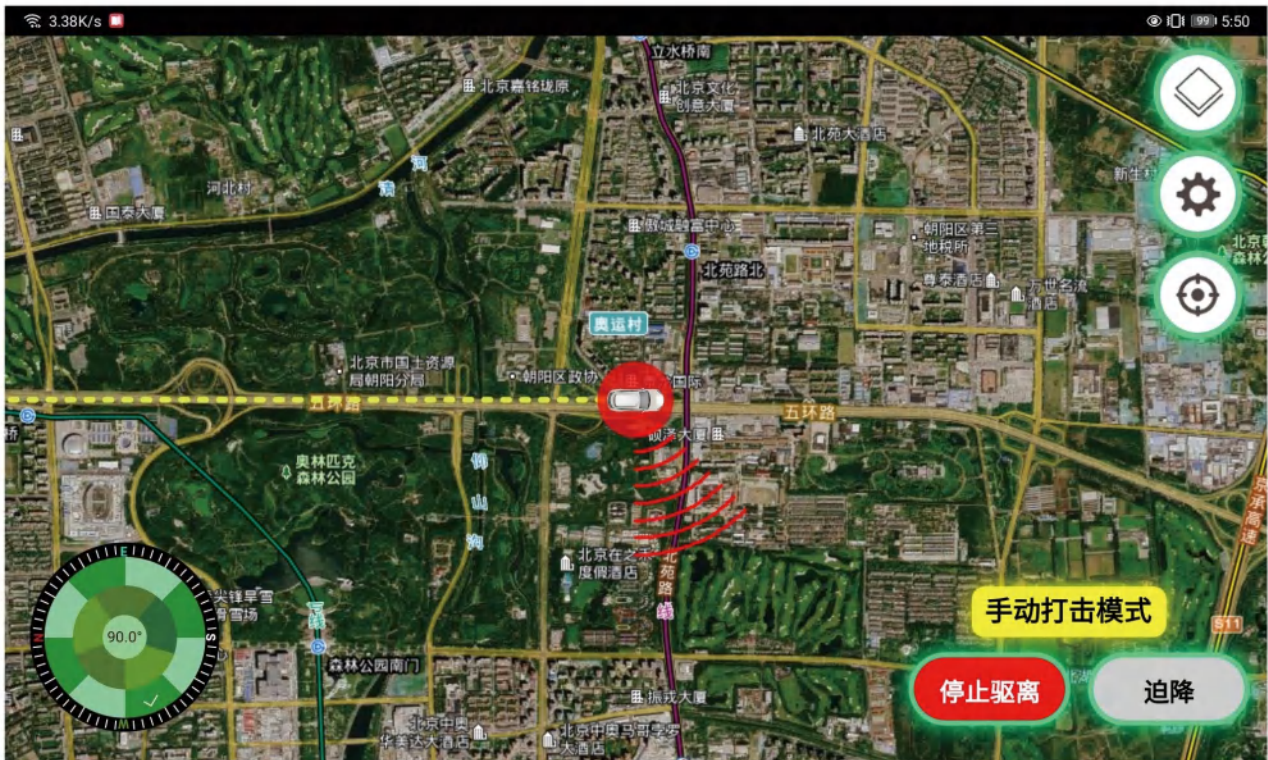
TOPOLOGY DIAGRAM



SOFTWARE INTERFACE



EFFECT DIAGRAM OF MEASURING UAV POSITION DURING TRAVEL



SECTOR JAMMING EFFECT DURING TRAVEL



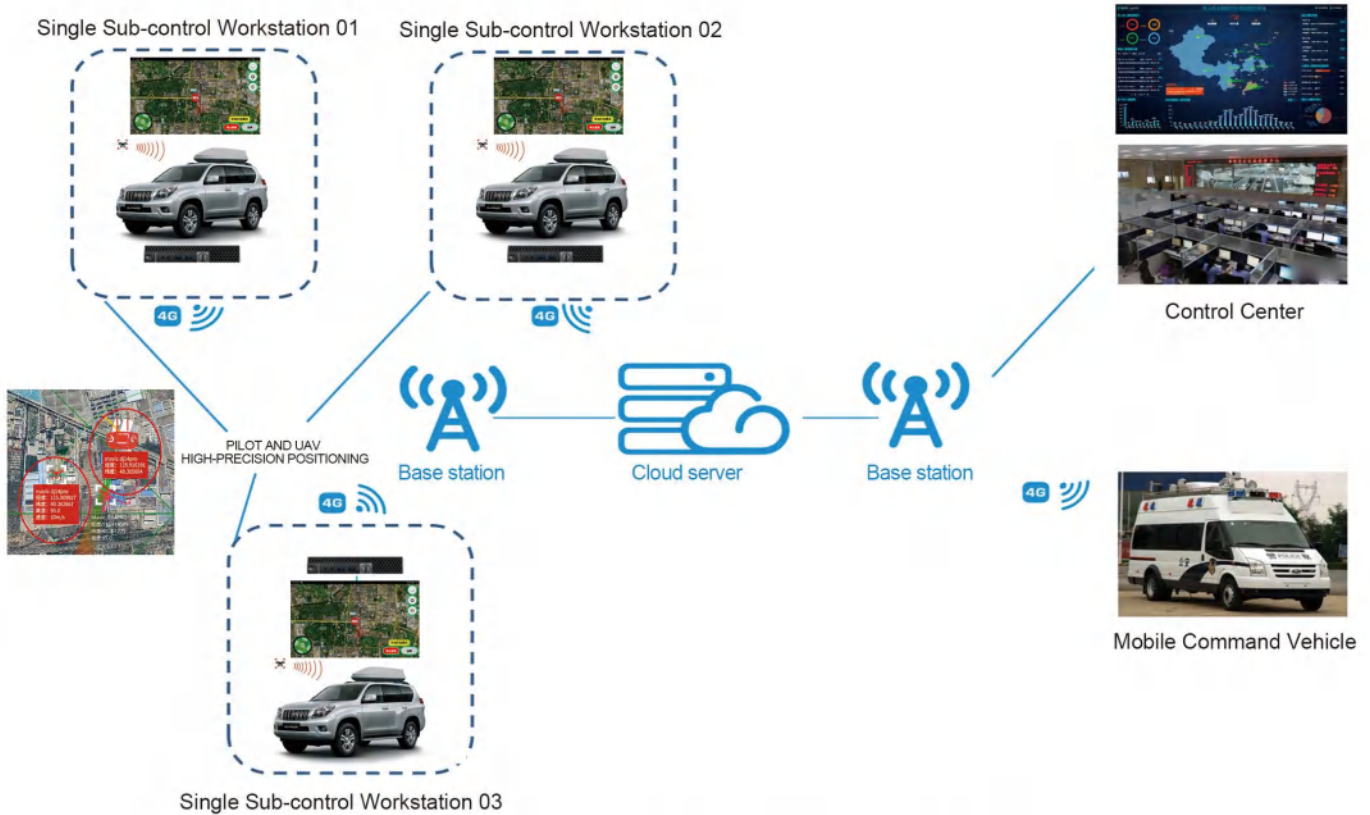
MULTI-SECTOR JAMMING EFFECT DIAGRAM AUTOMATIC OMNIDIRECTIONAL JAMMING EFFECT DIAGRAM

ADVANTAGEOUS PARAMETERS

Detection frequency	20MHz~6GHz	Countermeasures	Multi directional and multi frequency
Scanning frequency band	433MHz, 800MHz, 900MHz, 1.4GHz, 2.4GHz, 5.8GHz (can be configured according to demand)	Counter frequency band	800MHz, 900MHz, 1.4GHz, 1.8GHz, 2.4GHz, 5.2GHz, 5.8GHz
Detection distance	10km (depending on operating conditions)	Reverse dry to dry ratio	Better than 10:1 (Elf 4)
Detection angle	360°	Deception signal type	GPS、GLONASS、GALILEO、BD
Directional accuracy	3°	Deception control radius	5km (adjustable)
Analysis and positioning	Elves, Kings Air、Mini、FPV、Avata Waiting for DJI series drones	Deception style	no fly, refusal, and expel in any direction, with real-time adjustable direction during the driving process
Analyzing Information	SN code, speed, altitude, position and other information of drones and pilots	Automatic north calibration	Accurate and real-time
Working temperature	-40°C~70°C	Protection level	IP56

MULTI-VEHICLE NETWORKING SCHEME

A single vehicle works in real-time during travel while three or more vehicles execute tasks statically. Flexible networking can achieve precise technical basis for locating and forming trajectories of UAVs for command decision-making, and provide reliable technical data for quickly dispatching and handling by locating the pilot through TDOA positioning technology. Real-time data from various equipment can be synchronized and pushed to the mobile terminals of task execution personnel, on-site vehicle monitoring platforms and fixed command centers through various network methods, to meet the command requirements of multi-target, multi-level management and monitoring, and multi-platform data integration.



MULTI-VEHICLE NETWORKING DIAGRAM

APPLICATION SCENARIOS



VIP travel



Large-scale events



Event security



BAT-8000-TYPE GRID CONTROL PLATFORM

(Multi-level integrated management)

SYSTEM OVERVIEW

- ▶ The overall control platform utilizes a comprehensive perception network such as electromagnetic spectrum sensing, video image sensing, and IoT sensing, utilizing technologies such as big data processing, cloud computing, IoT, and artificial intelligence to form a systematic, flat, three-dimensional, intelligent, and humanized low altitude defense system. It can achieve comprehensive, three-dimensional, and blind spot free dynamic monitoring and flat command, rapid disposal, and precise control of key low altitude protection areas and high-risk industries.
- ▶ The sub control platform adopts a B/S structure design, which can load GIS high-definition maps, have functions such as multi-target intrusion alarms, precise target positioning, display target movement trajectory and flight controller position, and can achieve visualization and automation of the entire process of drone control. Reserve a data sharing interface, which can interface with external systems and meet the information sharing and data exchange needs of higher-level management departments or other departments. Multiple systems can flexibly achieve information exchange through networking, grid deployment, and cover urban level areas.

SYSTEM FUNCTIONS

[Grid deployment]

Support grid deployment of smart cities, with multiple deployment modes at the city level and key areas.

[Big Data Statistics]

Visualize big data low altitude situation statistical analysis, and clearly control low altitude safety.

[Multi level management]

Flexible hierarchical structure and different permission management facilitate precise and precise control.

[Intelligent processing]

Intelligent processing of electromagnetic spectrum, video images, and IoT data.

SYSTEM CHARACTERISTICS

1. Meet the development needs of smart cities and emergency management systems

The Internet of Things perception with wireless as the core is integrated into smart cities and emergency management systems, visualizing big data for precise analysis, providing strong data support for public safety and urban economic development, low altitude safety deployment, and decision-making.

2. Meet multi-level and cross regional control needs

The platform supports multi-level monitoring by departments, provinces, cities, districts and counties, and stations to meet the needs of multi-level, cross regional low altitude safety control and key regional low altitude defense.

3. Meet the requirements of different confidentiality levels

Support private and public clouds to meet different levels of confidentiality requirements.

4. Quick backup to prevent data loss

Anti ARP attacks and MAC spoofing, fast backup, and no data loss.

5. High reliability and safe use

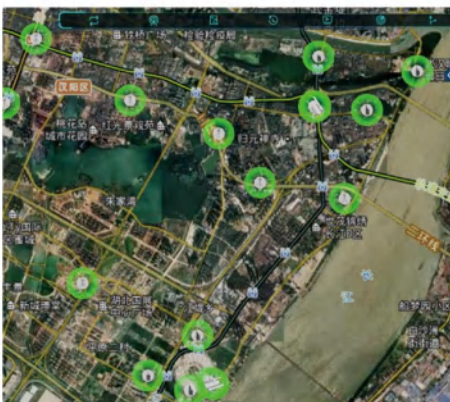
Cloud servers are based on server clusters, with high redundancy and low failure rates.

6. Meet flexible requirements and increase configuration in real-time

Real time configuration can be added based on system deployment

APPLICATION SCENARIOS

GRID DEPLOYMENT



SMART CITY



SCAN THE CODE TO WATCH APPLICATION VIDEOS



PRODUCT SYSTEM | DETECTION SERIES PRODUCTS

Scanner-D Radio positioning detector



The radio positioning detector detects and locates illegally invading UAVs through radio frequency scanning, feature recognition and decoding. It can obtain the three-dimensional coordinate information of UAVs through multi-station networking and time difference passive positioning algorithm, and has high tracking and directional accuracy. It can detect control signals and image transmission information between intercepted UAVs and operators, and can operate during nighttime, heavy fog, and harsh weather conditions. It provides 24/7 uninterrupted monitoring and recording.

Detection range: 45MHz-6GHz
Detection distance: ≥ 5 km, up to 12.4km (depending on operating conditions)
Receiver sensitivity: ≥ -110 dBm
Scanning range: 360°
Operating temperature: -40°C to $+85^{\circ}\text{C}$
Power supply: AC220V
Weight: ≤ 5.25 kg

Scanner-Q Radio direction finder



The radio direction finder detects, orients and tracks illegally invading UAVs through radio frequency scanning, feature recognition and decoding, supporting standalone and networking operations. It has a high level of system integration and an integrated design. By wide-range frequency scanning, it detects and intercepts signals such as remote control and image transmission between the UAV and the remote controller, and can work continuously at night, in heavy fog, and in harsh weather conditions.

Detection frequency: 45MHz-6GHz
Detection distance: ≥ 5 km, up to 12.5km (depending on operating conditions)
Direction finding accuracy: $\leq 3^{\circ}$ (RMS)
Single station ranging accuracy: $\leq 10\%$ R
Multi-station positioning accuracy: $\leq 5\%$ R
Power supply mode: AC220V
Weight: ≤ 17 Kg

Scanner-J Integrated reconnaissance and jamming device



The integrated reconnaissance and jamming machine adopts a highly integrated passive detection design, suitable for small-scale defense in luxury homes, vehicles, etc. It can be quickly deployed, and a single device can achieve UAV detection and countermeasures, providing all-round low-altitude protection anytime, anywhere. It supports 4G and 5G wireless communication, allowing for flexible network expansion. Multiple stations can achieve wireless grid-based intelligent control.

Detection range: 300MHz-6GHz
Detection radius: ≥ 7 km
Detection angle: omnidirectional 360°
Countermeasure distance: ≥ 1 km
Interference frequency bands: 800M, 900M, 2.4G, 5.8G, navigation signals
Weight: ≤ 18 Kg

BAT-2000 Anti-drone radio active defense device



The navigation deception device is specifically developed to counter various security threats posed by illegal UAVs. By radiating low-power regenerated satellite navigation signals (power not exceeding 10dBm), it infiltrates the navigation system of illegal UAVs, thereby achieving interception and control of UAVs that require navigation system for flight control, preventing them from entering protected areas and ensuring low-altitude safety in those areas. This method is currently the only defense measure that meets the technical requirement of transmitting power ≤ 10 mw in anti-terrorism prevention.

Effective range: Not less than 500m (360 degrees without obstruction)
Operating frequency: Civilian drone navigation frequency bands
Signal transmitting power: ≤ 10 dBm(mW)
Power: 220V AC or POE
Operating temperature: $-40\sim 70^{\circ}\text{C}$
Level of protection: IP66
Dimensions: 300mm*300mm*385mm

DETECTION SERIES PRODUCTS | PRODUCT SYSTEM

BAT-ST Anti-drone radio active defense device



The anti-drone radio active defense device integrates radio detection and navigation deception functions, with highly integrated design and no need for external antennas, making it easy to install and implement; the equipment can work in a wide temperature range, with IP66, and can work at night, in dense fog, and in harsh weather conditions, allowing for 24/7 unmanned operation. During operation, the device continuously collects real-time radio signals from the surrounding area and scans them according to the configured frequency bands. When a low-altitude UAV target enters the defense area, it monitors and identifies suspicious link signals; provides target working frequency band, distance, and other information for judgment, evaluation, and early warning by control software, and implements protection through navigation deception signals according to the plan. The device is a fully passive detection system that does not generate any electromagnetic interference to the outside world. It is environmentally friendly and safe, suitable for long-term continuous use. Navigation deception is achieved by radiating low-power ($\leq 10\text{dBm}$) regenerated navigation satellite signals to intrude into the navigation system of illegal drones, preventing them from flying into protected areas.

Detection range: 20MHz-6,000MHz
Detection distance: $\geq 5\text{km}$, up to 10km (depending on operating conditions)
Receiver sensitivity: $\leq -110\text{dBm}$
Scanning range: 360°
Control radius: 500-1,000m
Deception signal power: $< 10\text{dBm}$ (10mW)
Deception signal types: GPS (L1), GLONASS (L1); optional BDS (B1), Galileo (E1)
Power supply: AC220V

BAT-STJ Anti-drone radio active defense device



The anti-drone radio active defense device integrates radio detection, digital electromagnetic suppression, and navigation deception functions. It features a highly integrated design without the need for external antennas, making it easy to install and implement. The equipment is designed for wide temperature operation and has IP66, allowing it to work during nighttime, heavy fog, and harsh weather conditions. It can operate 24/7 without human supervision. During operation, the device continuously collects real-time radio signals from the surrounding area and scans them according to the configured frequency bands. When a low-altitude UAV target enters the defense area, monitor and identify suspicious link signals; provide target working frequency band, distance, and other information for judgment, evaluation, and early warning by control software; launch digital electromagnetic suppression signals and navigation deception signals according to the plan to implement protection. The device is a fully passive detection system that does not generate any electromagnetic interference to the outside world. It is environmentally friendly and safe, suitable for long-term continuous use. The electromagnetic suppression is designed in a fully digital manner, with precise frequency setting and adjustable power, allowing for controlled usage effects. The navigation deception uses low-power radiation ($\leq 10\text{dBm}$) to regenerate navigation satellite signals, infiltrating the navigation system of the 'black fly' UAV, preventing it from flying into protected areas.

Detection range: 20MHz-6,000MHz
Detection distance: $\geq 4\text{km}$, up to 7km (depending on operating conditions)
Receiving sensitivity: $\leq -110\text{dBm}$
Scanning range: 360°
Interference frequency bands: 800MHz, 900MHz, 1.6GHz, 2.4GHz, 5.2GHz, 5.8GHz
Decoy interception distance: 1km (typical operating conditions)
Decoy signal power: $< 10\text{dBm}$ (10mW)
Decoy signal types: GPS (L1), GLONASS (L1); optional BDS (B1), Galileo (E1)
Control radius: 500-1,000m

BAT-Scanner-DM Portable radio positioning detector



When BAT-Scanner-DM portable radio positioning detector is operating, it collects surrounding radio signals in real time and scans them according to the configured frequency band. When a low-altitude UAV target enters the defense area, it can monitor and identify suspicious link signals to obtain target working frequency band, distance, and other information. The device can not only detect UAVs but also identify the model, serial number, longitude, latitude, altitude, pilot position, and return point location of the UAV. The device has a fully passive detection, which does not generate any electromagnetic interference to the outside world. It is environmentally friendly and safe, suitable for long-term continuous use.

Detection frequency band: 20MHz-6,000MHz
Detection radius: $\geq 8\text{km}$
Detection angle: horizontal 360° ; vertical -90° to $+90^\circ$
Detection height: 500 meters
Detection quantity: ≥ 40 units
Operating temperature: -10°C to $+50^\circ\text{C}$
Blacklist/whitelist: support
Level of protection: P67 (when the box is closed)
Weight: 15kg

BAT-5060 Vehicle-mounted integrated detection, jamming and navigation deception



The BAT-5060 vehicle mounted UAVs defense equipment includes four major functional components: precise direction finding, digital sector suppression, navigation deception, and target analysis and positioning. Supporting precise detection and countermeasures for high-speed driving, supporting long-term parking guarantee, and optimizing and enhancing the countermeasures unit for vehicle scenarios, with excellent performance. A single vehicle can achieve detection and countermeasures within a radius of 5km, and can easily complete accompanying support. Especially suitable for military restricted areas, visits of political figures, major events, and border patrols.

Detection coverage: 45MHz-6GHz
Detection radius: Up to 10km (depending on operating conditions)
Detection angle: 360°
Direction finding accuracy: $\leq 3^\circ$ (RMS)
Countermeasure: Multi-directional and multi-frequency
Countermeasure frequency band: 0.4G, 0.8G, 0.9G, 1.2G, 1.4G, 1.6G, 2.4G, 5.8G
Automatic north correction: Accurate and real-time

PRODUCT SYSTEM | COUNTERMEASURE SERIES PRODUCTS

Jammer-D Photoelectric tracking directional jammer



The photoelectric tracking directional jammer automatically tracks the target, captures images for recognition, issues warning prompts after determining the target, and automatically activates the jamming device. It uses electromagnetic suppression technology to interfere with and attack the target UAV, forcing it to hover, land, or return along its original path. The entire system is modularly designed, and each frequency band works independently controlled by the software platform, equipped with GPS for easy network deployment.

High-definition camera: 2 million pixels, 23x30x optical zoom (optional); automatic tracking and acquisition of target
Interference frequency bands: 900MHz, 1.6G, 2.4G, 5.8G, navigation signals; (expandable according to requirements)
Rotation range: azimuth 0°-360°, pitch -35° to 65°
Rotation speed: Max 60°/s
Positioning accuracy: ±0.2°
Interference distance: 2km (depending on operating conditions)
Weight: ≤27Kg

Jammer-DD Full band tracking directional jammer



The Jammer DD directional jammer can achieve automatic tracking based on the target orientation calculated by the control platform, and automatically activate the jamming equipment. Through electromagnetic suppression technology, it can interfere with and strike the target drone, forcing it to hover, land, or return on the same path. The entire system is designed with modularization, and each frequency band operates independently according to the software

Interference frequency band: 300MHz~6000MHz
Interference distance: 2km (depending on operating conditions)
Interference channel: 6
Real time broadband: 200MHz
Power: standby: 80W, full load: 850W
Rotation range: azimuth 0°~360°, elevation 0~60°
Rotation speed: Max 60°/s
Connection method: Network link (RJ45)
Power supply method: AC220V

Jammer-Q-4/8c Omnidirectional jammer



The omnidirectional jammer is deployed in specific protected areas to create a 24/7 no-fly zone for UAVs, forming a targeted and effective barrier. The system emits interference signals to interfere and block the remote control link, image transmission link, and navigation signals of UAV, forcing the UAV to land or leave. Each frequency band works independently controlled by the software platform, with modular design for easy network deployment.

Interference frequency bands: 400MHz, 800MHz, 900MHz, 1.2GHz, 1.4GHz, 1.6GHz, 2.4GHz, 5.8GHz interference remote control/image transmission signals (expandable according to requirements)
Control radius: 2km (depending on operating conditions)
Control angle: 360°
Power supply: AC220V
Operating temperature: -40°C to 85°C
Weight: ≤14.4Kg

COUNTERMEASURE SERIES PRODUCTS | PRODUCT SYSTEM

BAT-2000-GE Anti-drone radio active defense equipment



The portable navigation deception device is specifically developed to address various security threats posed by illegal UAVs. It infiltrates the navigation system of the UAV by radiating low-power regenerated navigation satellite signals (with a power not exceeding 10dBm), thereby gaining control over the UAV that requires the use of the navigation system for flight control. This prevents it from flying into protected areas. This technology is currently the only defense measure that meets the technical requirement of emitting power $\leq 10\text{mw}$ in anti-terrorism prevention. The system has high mobility and can be quickly and easily deployed in temporary protected areas to ensure the low-altitude security of the area.

Effective range: Not less than 500m (360 degrees without obstruction)
Operating frequency: Civilian drone navigation frequency bands
Signal transmitting power: $\leq 10\text{dBm(mW)}$
Power: It can be powered by mains or built-in lithium battery
Operating temperature: $-40\sim 70^{\circ}\text{C}$
Level of protection: IP66
Dimensions: 350mm*230mm*570mm

BAT-H1030 Portable UAV equipment for detection, suppression, and navigation deception



The BAT-H1030 portable UAV detection and deception integrated equipment integrates six electrical detection algorithms, eight frequency band electromagnetic strikes, and four mode navigation and deception, with a highly integrated design. The single equipment realizes the full process control of unmanned aerial vehicle detection, strike, and deception.

Detection frequency: 20MHz~6GHz
Detection distance: 500m~5km
Detection angle: 360°
Positioning accuracy: TDOA $\leq 20\text{m}$, resolution $\leq 5\text{m}$
Interference frequency band: 800MHz~6GHz 8-band
Interference distance: Remote control power 30dBm, dry to open ratio $>1:1$
Interference angle: $\geq 30^{\circ}$
Deception radius: 500m-1000m (adjustable)
Shell protection level: IP65

BAT-H1050 Handheld UAV detection and guidance integrated equipment



The BAT-H1050 handheld UAV detection and deception integrated equipment combines six electrical detection algorithms and four navigational deception techniques in a highly integrated design. This single unit oversees the entire process of detecting and deceptively managing unmanned aerial vehicles. During operation, the equipment identifies and decodes the radio frequency scanning features of illegal drones. Multiple algorithms enable presence detection, direction finding, human-to-aircraft positioning, ID recognition, image analysis, and support for TDOA positioning through a multi-unit network. Employing four-mode navigational deception technology, it emits false satellite navigation signals to disrupt the drone's navigation, leading to their prohibition, denial, or repulsion.

Detection frequency: 20MHz~6GHz
Detection distance: 500m~3km
Detection angle: 360°
Positioning accuracy: TDOA $\leq 20\text{m}$, resolution $\leq 5\text{m}$
Deception radius: 500m-1000m (adjustable)
Shell protection level: IP65

Manner-B Handheld interference gun



The handheld interference gun has the function of suppressing the remote control frequency band and image transmission frequency band of UAVs, and can also interfere with the navigation signal of UAVs. It can conveniently and quickly interfere with invading UAVs, with high aiming accuracy and long interference distance. It is suitable for events, personal security, and other scenarios.

Interference frequency bands: 2.4G, 5.8G, 1.6G, 800M, 900M, 1.4G
Interference distance: $>1\text{km}$
Working voltage: 22V
Working time: 60min
Battery capacity: 130Wh
Dimensions: 860mm*362mm*110mm
Weight: $<4\text{kg}$

APPLICATIONS | NATIONAL LEVEL (MAJOR SECURITY)

Security for Beijing Winter Olympics and Winter Paralympic Games



Security for the 70th Anniversary National Day Parade



Security for the Belt and Road Forum for International Cooperation



Security for the Boao Forum

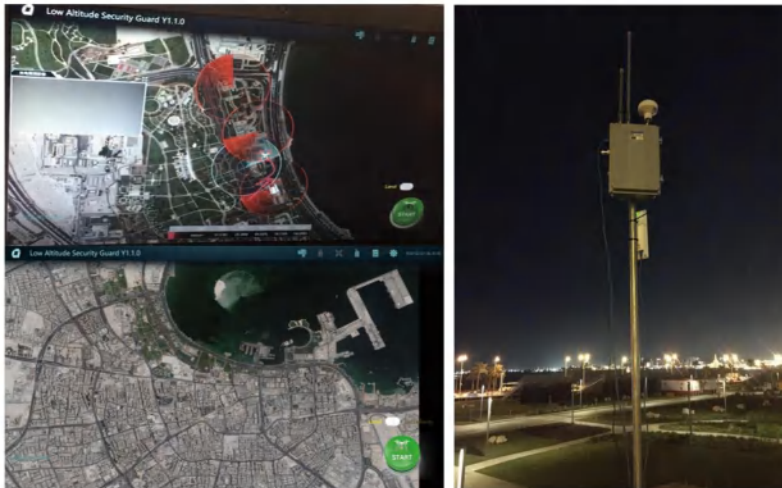


NATIONAL LEVEL (MAJOR SECURITY) | APPLICATIONS

Security for the 20th National Congress of the CPC



Security for 2018 Qatar National Day



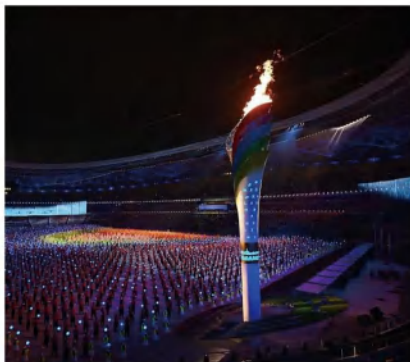
Security for the 100th Anniversary Celebration of the Founding



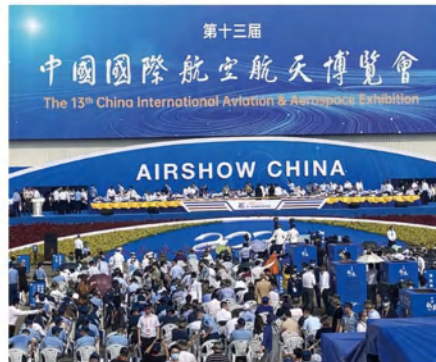
Security for Wuhan Military World Games



Security for The 14th National Games

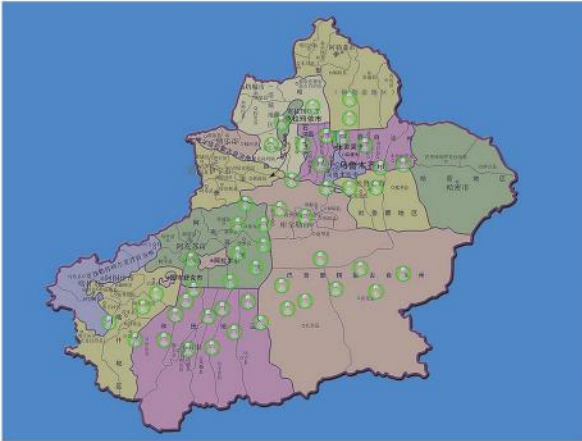


Security for Air Show China (Zhuhai)



APPLICATIONS | PROVINCIAL-LEVEL GRID INTEGRATION

Network Integration in a certain autonomous region



Integrated judicial grid system of a certain autonomous region



Grid Integration in a certain region of Wuhan Military World Games



Grid-based defense in a provincial capital city



APPLICATIONS | INDUSTRY APPLICATIONS

Smart prison



无线电被动探测雷达

光电跟踪定向打击

全向干扰打击



Civilian airport



Military airport



Beijing Universal studios



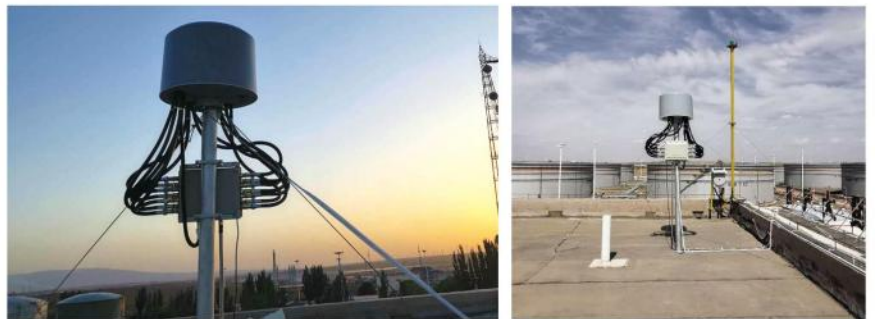
High-voltage substation



Thermal power plant project



Petrochemical project



Chemical industrial park



Military camp



July 2024 Edition



BITALLTECH (BEIJING) CO.,LTD.