



RF DETECTION AND GNSS SPOOFING SYSTEM

JP-D20C-LY206-S309 fixed radio passive detection system is capable of detecting, analyzing and classifying the radio signals of unmanned aerial vehicles within the wide band frequency spectrum range of 20MHz to 6050MHz, and implementing detection and direction finding based on the radio signals radiated by the unmanned aerial vehicles. After being turned on, the device can quickly and automatically detect and discover unmanned aerial vehicles, and provide early warning of the detection results through sound and light alarms.

The device can automatically respond to invading drones through a low altitude security management platform. Based on the detected location and spectrum information data of the drones, it can work with radio interference equipment to implement precise suppression of the target area, blocking the drone's image transmission signal and forcing the drone to return or make an emergency landing.

The RF detection and GNSS Spoofing system can work and be integrated with the command and control (C2) seamlessly for automatic response or manually command.



J.Phiphat Auto Part Industry Defense Department

90/29 Mu 7, Khlongnueng Sub-district,
Khlong luang District, Pathum Thani Province, Thailand 12120

Tel: +6698-892-3639 Whatsapp: +6698-892-3639

<http://www.jppautoparts.com>

PRODUCT PERFORMANCE

RF DETECTION

PRODUCT PERFORMANCE DETECTION AND POSITIONING

System Attribute	Parameter
Detection and Identify UAV Type	Multi-rotor drones, fixed-wing drones, FPVs
Example of UAV Type/Model in the library	DJI (Air, Mini), FPV, Autel, Dahua, Yuneel and other common brands
Detection Frequency	20 MHz~6050 MHz
Detection Range	10km (Coverage signal : Drone Data link, Remote Control Link, and Video Down Link)
Detection Height	0-2000 m
Detection Coverage	360°
Simultaneously Detected Target	≥40
Azimuth Error	≤0.5° (RMS)
Detection Finding Accuracy	Max 3° (RMS)
Positioning Accuracy	≤10m
Probe Success Rate	≥99%

PRODUCT PERFORMANCE

RF DETECTION

PRODUCT PERFORMANCE DETECTION AND POSITIONING

System Attribute	Parameter
Scan and Update Rate	≤2.5s (1 scan every 2.5 seconds across the entire monitored frequency band)
Continuous Working Time	7*24h
Communication Method	RJ45 interface communication TCP/IP protocol
Power Supply	220V/50Hz AC power supply
Total Power Consumption	90W
Operating Temperature	-40°C ~ +70°C
Storage Temperature	-50°C ~ +75°C
Protection Standard	IP65 equivalent to Military Standard (GJB 150A)
Dimensions	600 mm x 600 mm x 386 mm
Weight	≤18 kg
Data Coverage	Covers drone data link, remote-control link, and video downlink signals of unmanned aerial vehicles (UAVs)
Compliance (EMC/EMI)	GJB151B (equivalent to MIL-STD-461G)

GNSS SPOOFING PERFORMANCE

GNSS SPOOFING

CHARACTERISTICS

Properties	GNSS Spoofing (Deception)
Mechanism of action	Sends a fake signal in its place
Complexity	HIGH (Allows for drone direction control)
Responsiveness	The drone will fly according to the fake coordination we set
Specified function	Pinpoint capture, Targeted deterrence

USE GNSS SPOOFING WHEN:

Maximum safety is required:

Prevent drones from "falling" into crowds or important buildings by carefully luring them away or landing elsewhere.

Forensics:

Lure the drone to land at a designated point (Pinpoint capture) in order to examine it for information about the sender.

Areas where signal interference is dangerous: such as near airports or communication towers, where random jamming could damage other systems.

SUMMARY OF TACTICAL ADVANTAGES:

Long operating range: With a radius of ≥ 10 km, we can manage drones early on before they reach danger zones.

Flexibility: Can be installed as a vehicle-mounted system to monitor the situation or protect convoys.

All-weather: The system operates even at night with low visibility or in severe weather conditions (rain, snow, fog), which are often the times when drones infiltrate.

GNSS SPOOFING PERFORMANCE

GNSS SPOOFING

System Attribute	Parameter
Operating Frequencies	GPS L1/L2/L5, Galileo E1/E5, BeiDou B1C/B2/B3, GLONASS L1/L2
Probe Success Rate	≥99%
GNSS Spoofing (Omni Directional)	≥10 km (with target indication information)
Effective Angle of Action	360° Horizontally
Decoy Response Time	≤10s
Device Startup Time	≤30s
Total Power Consumption	150W
Protection Rating	IP65 equivalent to Military Standard (GJB 150A)
Dimensions	470mm x 470mm x 615mm
Weight	≤50kg
Compliance (EMC/EMI)	GJB151B (equivalent to MIL-STD-461G)