300–6000 MHz Full-Frequency UAV Detection & Jamming System

Backpack Multi-Band Omni Drone Detector & Jammer – 2-in-1

Overview

With the rapid development and widespread adoption of drone technology, drones have shown great potential in areas such as aerial photography, agriculture, rescue operations, and security.

However, this growth has also introduced increasing safety concerns. Incidents of illegal intrusion, malicious reconnaissance, and privacy violations are becoming frequent, posing serious threats to national security, public safety, and personal privacy.

Therefore, developing efficient and advanced counter-drone technologies has become an urgent necessity to maintain airspace security and ensure social stability.

The TTSKBPDJ-10 is a portable detection and jamming system with comprehensive drone monitoring capabilities.

It monitors the model and operating frequency of drones within range through data mining and in-depth analysis of drone signals, and performs signal jamming automatically.



Main Functions

Passive detection of UAVs
Signal jamming across multiple frequency bands
Data-driven drone identification (model, frequency, manufacturer)
Dual mode: Omnidirectional and directional detection
Quick response with low false alarm rate
Backpack portability for rapid deployment

General Specifications

Frequency coverage: 200–1020 MHz, 2.37–2.52 GHz, 5.1–5.2 GHz, 5.72–5.88 GHz

Extended model frequency: 400 MHz, 900 MHz, 1.2 GHz, 2.4 GHz, 5.2 GHz, 5.8

GHz

Supported UAVs: DJI (Phantom, Mavic series), FPV, FEMI, YUNEEC, AUTEL, HUBSAN, Powervision, Tello UAV, and video transmission modules

Detection range:

Standard model: **100–2000 m** (urban environment, tested with DJI AIR2)

Extended range model: Up to 10 km

Form factor: Backpack-mounted for field portability



A. Omnidirectional Passive Detection

No	Item	Technical Parameter
1	Work pattern	Passive detection
2	Work frequency	400M, 900M, 1.2G, 2.4G, 5.2G, 5.8G
3	Detection & identify UAV type	DJI series, FPV, FEMI, YUNEEC, AUTEL, HUBSAN, Powervision, Tello UAV, and video modules
4	Detection range	100-2000 m (urban environment, tested with DJI AIR2 target)
5	Probe azimuth	0°-360° (omnidirectional antenna)
6	Recognition time	≤ 2 s
7	False alarm rate	~1 time/day
8	Capacity of discernment	≥ 10 drones detected & identified simultaneously (across 5 manufacturers)

Direction Finding Mode — Directional Passive Detection

No.	Item	Technical Parameter
1	Work pattern	Directional passive detection
2	Object of action	DJI (Phantom & Mavic), AUTEL, HUBSAN
3	Work frequency	2.4 GHz, 5.8 GHz
4	Detection range	100-2000 m (urban environment with DJI AIR2)
5	Probe azimuth	≤ 30° (UAV does not change frequency during locked DF mode and is 1 km from the device)

Advantages

Wide frequency coverage: 300–6000 MHzCompatible with major commercial and professional UAV modelsRapid deployment with backpack portabilityLow false alarm rate with advanced signal analysisDual detection modes for flexible operationsLong detection range models available (up to 10 km)

Applications

Government & Military Security
Border Control
Critical Infrastructure Protection
VIP & Event Security
Airport & Seaport Perimeters
Anti-smuggling & Anti-terrorism Operations

