

H1B-D Handheld drone detection and direction finding device specifications

I. Overview

H1B-D is a handheld device for detection, identification and direction finding of drones. It identifies drone flight control and image transmission signals based on spectrum sensing and artificial intelligence technologies. Its features include: direction finding for Drones; detection of drones with full frequency bands and various types; long detection distance and low false alarm rate; large color screen display with rich display content; small size, light weight, hand-held and It can cooperate with anti-interference guns, and is suitable for security tasks in major events, industrial parks, border and coastal defense and other places.

II. Product Image



H1B-D handheld drone detection and direction finding device

Product composition:

#	Components	Quantity	Unit
1	H1B-D	1	pcs
2	Antenna	4	pcs
3	Type-c Interface charger	1	pcs
4	Protective case	1	pcs

III. Features

- 1、Passive detection, no signal emission, no interference to the peripheral, environment friendly;
- 2、Extremely portable, works alone or couple with a counter drone gun;
- 3、Antennas of different frequency bands can be configured as required, and the antenna interface adopts a common standard, which is easy to disassemble and replace;
- 4、Type-C charging interface, can use common Android phone charger;
- 5、Drop proof, works well under extreme weather conditions;
- 6、Direction finding capability with the directional antenna.

IV. Specifications

4.1 Performance

● Omni-directional detection mode

#	Item	Technical Parameters
1	Operating mode	Passive detection
2	Drone models supported	DJI series drones, FPVs, Xiaomi, Yuneec, Hubsan, Hubson, Powervision, Tello drones etc.
3	Working frequency	900MHz、1.1GHz、1.2GHz、1.4GHz、2.4GHz、5.2GHz、5.8GHz
4	Detection range	0-800 meters (urban environment, tested with DJI AIR2 as the target)
5	Azimuth	0°~360° (omnidirectional antenna)
6	Recognition time	≤2s
7	False alarm rate	≤once/day (In an anechoic chamber environment)
8	Swarm detection	≥10 concurrent drones

● Direction finding mode

1	Operating mode	Directional passive detection
2	Action object	Some drones such as DJI (Phantom series and Yu series), Autel and Hubson
3	Working frequency	2.4GHz and 5.8GHz
4	Detection distance	100-2000 meters (urban environment, tested with DJI AIR2 as the target)
5	Probe azimuth	≤±18° (Target 1km away with frequency locked)

4.2 Mechanical parameters

1	size	L*W*H: 235mm*66mm*43mm (the host)
2	weight	≤800g (Antenna not included)
3	Battery life	≥6 hours
4	Charging time	≤3 hours (using the original charger)
5	Charging interface	Type-C

4.3 Electrical characteristics

1	Overall power consumption	$\leq 6W$
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4.4 Environmental adaptability

1	Operating temperature	-20℃~55℃
2	degree of protection	IP54

4.5 Battery parameters

1	Nominal capacity	5Ah
2	Nominal voltage	7.4V
3	Battery type	lithium battery

V. Functions

- 1、Real-time display of detailed drone information such as make, model, frequency, etc;
- 2、Supports adjustment of detection sensitivity in four levels;
- 3、Supports various alarm forms such as light, sound and sound and light, and the urgency of the alarm ringtone and the flashing frequency of the light are adjustable;
- 4、Direction finding capability after switching to the directional antenna;
- 5、Online update of drone library;
- 6、Low battery level alarm;
- 7、Multiple language optional;
- 8、Reset the device to out-of-factory state;
- 9、Storage and view of historical detection result data;
- 10、View of drone library, including drone make, model and frequency;

- 11、 Signal strength display, the device can display the signal strength of the detected drone;
- 12、 Detected drones that can invoke direction-finding function will be marked;
- 13、 Once the device enters direction finding mode, the signal strength of the detected drone will be displayed, including maximum strength, instant strength and average strength.