

Drone control equipment

Technical specification v1.0



Product Name: UAV Control Equipment

Model: ZD-SJ1

catalogue

Integrated UAV Detection and Control	I
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I. Product Overview

ZD-SJ1 is a high-performance drone control product that uses advanced multi-band countermeasures technology to precisely cut off the communication and command link between drones and remote controllers, effectively forcing drones to return or land. The product supports networking of multiple units, allowing flexible deployment based on actual needs, significantly expanding control range and efficiency; it also features millisecond-level response speed, enabling rapid reactions to intruding drones

Featuring an integrated all-in-one design, ZD-SJ1 enables rapid deployment across diverse environments and swift setup even in complex terrains. Its high-performance countermeasure system operates in real-time coordination with detection equipment, delivering precise targeted jamming with stable and reliable performance.

The ZD-SJ1 system is designed for multiple scenarios including major event security and public patrol, providing police officers with technical support to rapidly neutralize unauthorized drones, enhance area surveillance capabilities, and safeguard low-altitude airspace security.

II. Product composition

The product is mainly composed of seven parts, such as equipment host, power supply box, bracket, heavy load line and accessories, as shown in the following table:

Table 1 Product hardware composition details

No.	Device name	Quantity	Remarks
1	ZD-SJ1 equipment host	1	
2	power box	1	
3	12-core DC cable	2	
4	3-meter network cable	1	
5	Lingkow line plug 24	1	
6	Network cable extender	1	
7	router	1	
8	M10*40 hex socket combination with flat washer nut	8	

III. Product functions and features

- 1) Multi-band countermeasure: can suppress the common frequency bands of 900MHz, 1.5GHz, 2.4GHz, 5.2GHz, 5.8GHz and other UAVs simultaneously or independently, or expand other frequency bands on demand;
- 2) Detection coordinating jamming: jamming module is Real-time coordinated operation with detection devices for persistent target tracking and jamming capability;
- 3) Minimal Secondary Disturbance: Six independently controlled jamming sectors provide spatially targeted engagement with reduced environmental impact.;
- 4) Rapid response: disposal response time <3s;
- 5) Multi-link network: multi-device networking function is available for convenient maintenance;

IV. Product indicators and parameters

4.1 Performance indicators

Table 3 Product performance indicators-countermeasures

No.	Project	Parameter
1	work pattern	Radio interference suppression
2	Objects of action	Drone mapping, flight control link, navigation signal
3	Working frequency band/ Bandwidth of amplifier	Channel 1 (900MHz): (880±10)MHz ~ (930±10)MHz; Channel 2 (1.5GHz): (1550±10) MHz ~ (1640±10) MHz; Channel 3 (2.4GHz): (2400±10)MHz ~ (2500±10)MHz; Channel 4 (5.2GHz): (5140±10)MHz ~ (5320±10)MHz; Channel 5 (5.8GHz): (5725±10) MHz ~ (5875±10) MHz Common frequency bands used by UAVs can be independently controlled and combined on demand
4	Counter-power	Output power of each port: Channel 1: 44±2dBm; Channel 2: 44±2dBm; Channel 3: 46±2dBm; Channel 4: 44±2dBm; Channel 5: 46±2dBm.
5	Coverage Angle	Horizontal direction: 0°~360° Lift: -30°~60°
6	Maximum number of simultaneous transmission frequency bands	5
7	You can counter the quantity at the same time	Not less than 5 flights
8	Effective counter distance	1.5km-2km (depending on the environment and model)

9	Counter-model	Full azimuth/Direction (single sector 60°)
10	Intercept response time	No more than 3s
11	Internet access	Supports wireless routing and wired connections

4.2 Mechanical parameters

Table 4 Mechanical parameters of products

No.	Metric	Parameter	Remarks
1	weight	≤50kg	main engine
2	size	Φ*H(600mm*420mm)±2mm	

4.3 Electrical characteristics

Table 5 Electrical characteristics of products

No.	Metric	Parameter	Remarks
1	Overall machine power consumption	≤3500W	
2	External power supply voltage	AC 100 ~ 240V	

4.4 Environmental adaptability

Table 6 Environmental adaptability

No.	Metric	Parameter	Remarks
1	working temperature	-20 ~ 65℃	
2	levels of protection	IP65	