

GUN ANTIDRONE DEVICE



Product main unit x 1
Charging power x 1
Battery x 1
Airline case x 1
Carrying strap x 1

Name	Anti Drone Gun	Custom	Support
Channel	410MHZ-460MHZ 824MHZ-960MHZ 1100MHZ-1300MHZ 1350MHZ-1450MHZ 1550MHZ-1650MHZ 2400MHZ-2500MHZ 5150MHZ-5250MHZ 5700MHZ-5900MHZ	Function	Forced drone to land, return to flight, cut off video
Distance	1000 – 2000m	Output Power	180W
Weight	6.0Kg	Size	710*290*70mm)
Voltage	220V to DC 29.4V	Power Supply	Built-in battery24V (5AH)
Directional Antenna	Vertical 45° Horizontal 45°	Temperature	-20℃ / +45℃



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Data analysis:

According to the testing standards of the Ministry of Public Security, the distance between the drone and the remote control is 100 metres and the jamming distance is around 1000 metres; the anti drone device is used to destroy the drone reception conditions and cut off the communication between the drone and the remote control by generating an interference signal with the same frequency as the drone reception to achieve the jamming effect.

The shielding radius in unobstructed space is determined by both the path attenuation and the level of the control remote control transmission signal. The table below gives a comparison of distance and path attenuation.

The radius of coverage can be determined by the output channel power of the jammer, the remote control signal level and the gain of the coverage line. As following equation:

$$P_{ch} + G_{at} - L - FAF \geq P_{rx}$$

P_{ch} : Output channel power minimum

G_{at} : Antenna gain

L : Path attenuation

FAF : Additional value of path loss, range 6-8dB

P_{rx} : Received signal strength



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Distance VS. Attenuation table

$L=32+ 20\log d +20\log f+ \text{FAF}$

f (MHz)

d (km)

Distance (km)	900MHz Loss (dB)	1575MHz Loss (dB)	Distance (km)	MHz Loss (dB)	900MHz Loss (dB)
1	38	44	25	66	72
2	44	50	30	67.5	73.5
3	48	54	35	69	75
4	50	56	40	70	76
5	52	58	45	71	77
6	53.5	59.5	50	72	78
7	55	61	60	73.5	79.5
8	56	62	70	75	81
9	57	63	80	76	82
10	58	64	90	77	83
15	61.5	67.5	100	78	84
20	64	70	200	84	90



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Other questions & Answers

Q: Will the anti drone device interfere with the normal work of other electronic equipment?

A: It will not. This is because the electromagnetic signals emitted by the drone jammer fall entirely within the national regulations of the working band and will only have a shielding effect on communications.

Q: Is the anti drone device harmful to humans and mobile phones?

A: Users can rest assured that the strength of the electromagnetic signals emitted is very weak and test data shows that this signal strength is far from being harmful to the human body. At the same time, it is only the forward signal that interferes, so that the drone cannot establish contact with the operating remote control, therefore, it will not produce any damage to the drone itself at all.

Q: Is there a difference in distance between the anti drone device when used indoors and outdoors?

A: There is. Generally speaking, the outdoor signal is stronger than the indoor one, so the indoor interference effect is poor. Strictly speaking: whether it is used indoors, or outdoors,; the effective distance of the drone jammer is related to the electromagnetic environment and the surrounding environment at the time. Such as the distance from the near and far, the location of placement, etc.

Q: Anti drone device after working for a period of time the case is hot, long time work will not damage the machine?

A: Thank you for your care, this is a normal phenomenon. In the design, we are using the thermal conductivity of the aluminium housing to assist in heat dissipation. This allows the machine to work steadily over a long period of time. Therefore, the machine will not be damaged by the heat generated by the housing



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Scope

Main Unit



Carrying Strap



Battery



Handle



Charger