Civilian UAV Active Defense System Product Brochure

AUDS-2458/AUDS-2458pro

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1. Product Overview

This series of equipment is designed for active defense of civilian drones and provides two solutions:

- 1.0 Basic Version (AUDS-2458): Full-band suppression interference, fast response and non-inductive deployment

- 1.1 Intelligent version (AUDS-2458 Pro): OFDM signal detection + precise countermeasure to reduce the risk of false interference

Design concept: Through the radio protocol layer cracking technology, the forced landing/return control of mainstream drones (2.4GHz/5.8GHz) can be realized to ensure the low-altitude safety of key areas.

2. Version function comparison

Functional modules	1.0 Basic version	1.1 Smart version
Working Mode	Continuous interference across the entire frequency band	Spectrum monitoring → target identification → directional interference
Response speed	≤3 seconds	≤1.5 seconds (interference link establishment detected)
OFDM Signal Analysis	Not supported	Support (identify drone communication characteristics)
Multi-target processing capability	Maximum 8 channels	Maximum 16 channels
Typical deployment scenarios	Temporary event security	Long-term deployment in high-density sensitive areas

3.Core technical parameters

General parameters
- Frequency band coverage：2.400-2.4835GHz / 5.725-5.850GHz
- Interference power：30W-50W（Complies with FCC Part 15 radiation standards）

Range：
- Open environment：≤2000m
- Urban Environment：≤800m（Affected by building occlusion）

Power supply system：
- Input: AC 220V±10% 50/60Hz
- Backup power supply: optional 48V lithium battery module (battery life ≥ 4h)

Environmental adaptability：
- Working temperature: -20℃～+60℃
- Protection level: IP54 (dustproof/splashproof)
- Shock resistance standard: MIL-STD-810G

1.1 Intelligent version enhanced parameters
- Spectrum scanning speed: 20MHz/ms
- Signal recognition library: pre-stored 37 drone protocols including DJI, Dotong, Autel, etc.
- Intelligent decision-making algorithm: adaptive adjustment of interference parameters based on deep learning

4. Application scenario description

4.1 Privacy Protection Scenarios

- Villa/Manor Defense: 360° coverage radius 1.2km, support for multi-device networking

- Data security scenarios：

- Corporate R&D Center: Blocking aerial photography to steal secrets

- Government agencies: Preventing leakage of sensitive information

4.2 Public safety scenarios

- Large event support:

- Concerts/sports events: blocking illegal live broadcast links

- Emergency command site: Establish a clear protection zone

4.3 Special industry applications

- Anti-cheating in exam rooms: Directional shielding of suspicious radio signals

- Prison perimeter control: 24/7 automated guard duty

5. System Operation Guide

5.1 Quick Start Process

1. Safety check: Make sure the antenna is firmly connected and there are no people around.

2. Power connection: Connect to a regulated power supply (UPS is recommended)

3. Mode Selection:

- Basic version: directly press <Start> to enter full-frequency interference

- Smart version: Select [Auto Protection] mode through the touch screen

4. Status monitoring: Observe indicator light (green: ready; red: working)

5.2 Advanced function settings (version 1.1 only)

- Whitelist management: authorize specific devices to communicate with exemptions

- Electronic fence settings: Customize 3D protection area

- Log export: record all defense events (time/GPS coordinates/drone type)

6.Safety and Compliance Statement

6.1 Limitation of Use

- It is strictly prohibited to use in special areas such as airport clearance areas and medical institutions
- It is prohibited to modify the transmission power or frequency range without authorization

6.2 Legal Notice

- This device can only be used after obtaining permission from the local radio regulatory agency.
- The user shall bear all legal responsibilities for communication interruption caused by illegal use.

7.Maintenance and after-sales service

- Daily maintenance:
- Clean the heat dissipation holes monthly to ensure adequate ventilation
- Perform system self-tests (built-in diagnostics) quarterly
- Warranty Terms:
- 2-year warranty for the whole device (1-year warranty for antenna module)
- Upgrade Service:
- Provide signal signature library updates every year (exclusive to version 1.1)

8.appendix

- Certification mark: FCC ID、CE、RoHS
- Electromagnetic compatibility: Comply withGB9254-2008 Class B
- Packing list: host × 1, omnidirectional antenna × 2, power cord × 1, quick guide × 1

Note: It is recommended to create the following visual elements in conjunction with the professional manual:

1. System architecture diagram (showing the entire process of signal detection → analysis → interference)
2. Deployment diagram (device placement suggestions in different scenarios)
3. Status indicator decoding table (picture and text comparison)
4. Safety operation warning icons (international common symbols)