

SkyControl RF - Smart & Autonomous Counter-Drone Technology

Stationary · Passive Detection

SkyControl RF is a stationary, passive RF (radio-frequency) drone detection system. It is a smart, autonomous, next-generation counter-drone technology designed to detect, identify, and locate UAVs (unmanned aerial vehicles) and their remote controllers without emitting signals, ensuring stealthy operation.

The system emphasises high accuracy, minimal false alarms, and ease of use for applications like security and airspace monitoring.

Detection Frequency Bands

- 433 Mhz ISM band (Optional, no DF)
- 868 MHz ISM band (Optional, no DF)
- 915 MHz ISM band (Optional, no DF)
- 2.4 GHz ISM band
- 5.2 GHz/5.8 GHz ISM band
- 400MHz to 6GHz FPV detection

Supported Modulations

- OFDM, DSSS, FHSS, GFSK, OQPSK, Analog FM, 2FSK, BPSK, QPSK, 16QAM, 64QAM, etc.



The SkyControl RF Sensor

At a Glance

Its long-range precision protection SkyControl RF delivers up to 35 km passive detection with near-zero false alarms, precise friend-or-foe identification, accurate direction finding, and effortless installation and operation for reliable, autonomous counter-drone security.

Its simple plug-and-play setup offers seamless deployment and operation.

- ✓ **Up to 35KM Detection**
- ✓ **Near Zero False Alarms**
- ✓ **Identification Friend or Foe**
- ✓ **Easy Installation and Operation**
- ✓ **Direction Finding**



SkyControl RF Deployed with SkyControl PDD

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SkyControl RF Data - Stationary Passive Detector

Detection Methodology	Passive detection of radio-frequency (RF) signals; zero emission
Detection Range	Up to 35km
Detection Angle Range	Full 360° (all-airspace)
Detection Finding (DF)	7.5°RMS
List Of UAVs And Remote Controllers	Extensive library coverage, which includes more than 495+ different drones/UAVs, remote controllers, drone-telemetry and FPV models
Electronic Fingerprints	UAVs and remote controllers are detected precisely and identified with electronic fingerprints. Simultaneously tested and verified identification of 30+ different UAVs (15+ non-DJI models) and 30+ different remote controllers (15+ non-DJI models)
Whitelist/Blacklist	Supports whitelist/blacklist feature for brands/models, distinguishing friend from foe
System Configuration	Can be done easily through graphical user interface (GUI)
Software Upgrade	Can be upgraded online or offline
Dynamic Deployment	Supports cloud as well as local deployment. Flexible multi-site, multi-device deployment is possible using the cloud server
Remote And Mobile Access	Easy access to management systems. The product can be operated from smartphones, tablet, and computer
Multi User Access	Central control GUI can be accessed via web browsers (e.g. Google Chrome) and mobile applications (e.g. Android mobile app) by multiple users at the same time.
Centralised And Distributed Monitoring	All devices can be monitored and maintained centrally, as well as individually
Control Functions	Control functions include but are not limited to viewing the system operation status, receiving drone activity alerts, viewing black and white lists, etc.
User Authorisations	Different user roles have access to different features

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Radio Frequency Range	70MHz - 6GHz
Dynamic Range	70dB
Compliant Certification	MIL-810-H, CE: REACH/ROHS
Scanning Frequency Resolution	≤100Hz
Minimum Frequency Bandwidth Detectable	100Hz
Sensor (Including Antenna) Weight	9.5KG
Sensor (Including Antenna) Size	310mm (diameter) * 410mm (height)
Power Supply Mode	100V ~ 240V (DC 24V option available)
Vehicle Mounting Option	Yes
Shell Protection Level	≥IP66
Working Temperature	(-25±2)°C~ (+55±2)°C
Supported Wireless Protocols	LightBridge, LightBridge 2, Ocusync, Ocusync 2.0, Ocusync 3.0, Ocusync 4.0, Autel Skylink, WIFI and WIFI variant protocols, LTE and LTE variant protocols, Zigbee, Bluetooth, BLE, NTSC, PAL, Majority of DIY remote controller and drone-telemetry protocols and FPVs, etc
Supported Wireless Modulations	OFDM, DSSS, FHSS, GFSK, OQPSK, Analog FM, 2FSK, BPSK, QPSK, 16QAM, 64QAM, etc

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