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Spotter is a cost-effective drone detection system designed for 24/7 monitoring around airports, large public events, and critical infrastructure. It integrates radar, optical detection, and radio frequency (RF) detection technologies to provide real-time drone location and flight information, enabling rapid decision-making.

The system features a distributed AI processing architecture, enhancing resource utilization through parallel processing and load balancing. By deeply integrating artificial intelligence, Spotter delivers an intelligent, high-performance, and scalable solution for drone monitoring and countermeasures. It is specifically engineered to address the security requirements of diverse and complex operational scenarios, ensuring comprehensive protection for critical applications.



#### FEATURES



## Multidimensional Detection Capabilities

Combines radio frequency (RF)
detection, radar, and optical
technologies to deliver comprehensive
monitoring of aerial and ground threats,
ensuring seamless 360° coverage with
no blind spots.



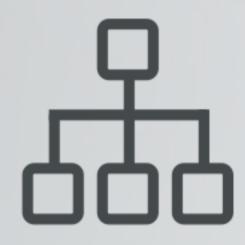
## **Cost-Effective and Efficient Deployment**

Features optimized design and modular architecture, significantly reducing hardware costs and maintenance expenses. This makes it suitable for large-scale deployments across diverse operational scenarios.



## Intelligent Analysis and Response

Automatically identifies and classifies drone threats, minimizing false alarms and enhancing detection accuracy. Behavioral analysis predicts potential flight paths, enabling early warnings or preemptive countermeasures.



#### Distributed Architecture

Leverages multi-node parallel processing, load balancing, and redundancy mechanisms to achieve high scalability and fault tolerance, meeting the demands of large-scale data processing and complex operational tasks.



#### Flexible Expansion and Integration

Supports multiple interfaces and protocols for seamless integration with existing security systems, addressing the personalized needs of various clients.





Radio Frequency (RF) Detection Module	
Detection Frequency Bands	400~6000MHz
Detection Range	3km
Supported Drone Types	Commercial Drones  Homemade or DIY Drones
Maximum Detection Capacity	30
Refresh Rate	<3s
Non-conventional Drone Directional Accuracy	<30°
Multi-Site Localization	Requires at least three sites
Multi-Site Horizontal Localization Accuracy	<15m
Blacklist and Whitelist Functionality	Support

Radar Detection Module	
Scanning Method	Active Electronically Scanned Array
Waveform Mechanism	Frequency Modulated Continuous Wave
Operating Frequency Band	24.05 GHz ~ 24.25 GHz
Radar Capability	5-inch FPV>700m; Small Quadrotor UAV; Large Multirotor UAV; Human>2500m; Vehicle>4000m
Distance Blind Spot	≤20
Detection Angle Range (2*Radar)	Horizontal: 180° Vertical: 40°
Number of Tracks	5 ~10 (TAS) 100 (TWS)
Speed Range	1-60m/s (Drone Mode)

Visual Detection Module	
Detection Range	>1000m
Detection Mode	Visible/Thermal Imaging
Focal Length	Visible: 6~336mm; Thermal Imaging: 150mm
Field of View (FOV)	Horizontal: 360°; Vertical: -60° to 90°