

ALPHAPEC 820 Nuclear Detection Remote Sensing UAV

Product overview

The ALPHAPEC 820 is a nuclear fallout and chemical warfare agent detecting drone. The flight platform adopts DJI's industrial grade M300 RTK drone. The detector module fuses the cutting-edge time-of-flight ion mobility spectrometry and array multi-sensor technology for chemical detection, scintillator and SiPM for nuclear radiation detection. It is capable of detecting trace chemical agents, industrial toxic and harmful gases and radioactive pollution online, fast and with precision.



- I. Unmanned nuclear radiation and chemical hazard detection;;
- II. Support Beidou, GPS , GLONASS and GALILEO positioning and navigation functions;;
- III. Visualization, providing a high-definition 3D map of the surrounding environment;;
- IV. Conduct safety assessments of hazardous areas in advance from a safe distance

Technical indicators

Drone Specifications			
Image Transmission Distance	n 15km	Flight Altitude	n 7km
Flight Radius	n 7.5km	Max Speed	23m/s
Max Flight Time	55 min	Obstacle Avoidance	AI-Driven Six Directional Sensing and positioning

Chemical Agents Detection Specifications			
Sarin	0.2mg/m ³	Ammonia	10mg/m ³
Soman	0.2mg/m ³	Chlorine	20mg/m ³
lewisite	0.2mg/m ³	Sulfur Dioxide	10mg/m ³
Tabun	0.2mg/m ³	Hydrogen Sulfide	10mg/m ³
VX	0.2mg/m ³	Hydrogen Chloride	20mg/m ³
Mustard Gas	1mg/m ³	Carbon Monoxide	10mg/m ³
Hydrogen Cyanide	10mg/m ³	Carbon Dioxide	10mg/m ³
Phosgene	10mg/m ³	Hydrogen Fluoride	10mg/m ³

Application area

The ALPHAPEC 820 Nuclear Detection Remote Sensing UAV can be widely used in chemical prevention reconnaissance, dangerous chemical explosion site, industrial park inspection, nuclear power plant leak detection, environmental protection..

