



Drone aerodrome security vigilance system-ORION SA150



Drone Aerodrome Security Vigilance System ORION SA150 is a vigilance equipment independently developed by Bytech, which is the first security vigilance system specially designed for drone hangars in the industry. The system aims to solve the drone flight and aerodrome security problems caused by human or animal intrusion around the hangar. While protecting its own equipment, it effectively protects personal safety of the surrounding people through sound and light warnings and other means.

SA150 has detection capability within a diameter range of 12 meters, and the radar positioning data performs automatic tracking and locking through the full-color night vision lens. It warns by sound and light or expels people or animals that invade the warning range. What's more, the system has laser guidance warnings and reminders of vibration, water immersion, power failure, and network disconnection to ensure the safe operation of the aerodrome around the clock. It supports the power supply of hangars, as well as UPS power supply and wireless communication module, to ensure



surrounding safety in extreme environments such as power outages and network outages. The standard back-end management platform records all kinds of early warning messages in real time and transmits them to the command center or the mobile device of the relevant person in charge.



Radar detection



Laser guidance



360° omni directional
monitoring



Audible and visual
bird repelling



Remote contro



Remote intercom



Backstage
management



Independent
power supply

Product Parameters

○ Device host

Name	Drone Airport Security Alert System
Model	SA150
Dimensions	244mm*105mm*157.8mm
Weight	810g±4%
IP Grade	IP66
Rated power	15w
Maximum power	50w
Voltage	12v
Current	4A
Interface	Type-C
Power supply mode	power supply by aerodrome and battery power
Endurance time	4.5hours
Battery capacity	2000mAh



Communication method	WIFI、 4G
Monitoring area	vertical: from-15°(depression angle) to +75°(elevation angle);horizontal: 360°
Pan-tilt polling	support
Pixels	4 megapixels
Resolution	2560*1440
Frame rate	25fps
Image sensor	1/1.8" super star-level CMOS
Video compression	H.264
Field of view (FOV)	DHV: 99*82*44
Camera functions	picture-taking, video recording, video playback, and download
Horn power	30W
Broadcasting distance	150m
Flashing warning	red、 blue
Flashing light power	20W
Warning distance	150m
Millimeter wave range	12m
Fill light	support
Vibration detection	support
PC control	support
Laser band	520nm
Laser power	1W
Bird repellent function	support
Power failure/network disconnection/flooding warning	support
Laser irradiation distance	2000m
Warning content	default, customization
Warning means	Phone, SMS, mobile devices
Remote monitoring:/Remote control/Remote call	support



Positioning module	GPS/Beidou 2/Beidou 3/GLONASS/Galileo
Material	ABS/Aluminium alloy
Installation	screw fixed
Operating temperature	-25°Cto55°C
Storage temperature	-30°Cto60°C

Product Characteristics

Rich functions with three dimensional protection

Integrating the millimeter wave radar, camera, flashing lights, speaker, laser module, vibration sensor, and other modules, it can effectively warn the onlookers while protecting the safe operation of the aerodrome, and prevent flight accidents caused by straying into the warning range.

Live detection and 360° omni-directional monitoring

The warning radar can detect living organisms and set a warning circle with a diameter range of 1–12 m. The pan-tilt lens has an intelligent AI algorithm to identify key information such as personnel, vehicles, and fireworks, preventing hidden dangers in a 360° all-around way.

Full-color night vision laser lens

The black-light full-color lens records the details of the night.

Independent power supply with longer protection

Two power supply modes, power supply by airborne and built-in battery, are adopted to achieve delay protection in the case of aerodrome power failure.

Standard cloud platform system

The cloud platform management system can remotely control the



operations of SA150, send all kinds of messages for warning in real time, and save them in the background terminal to generate reports , so that the case can be documented.

○Dual frequency bird repelling and worry-free take off and landing

The equipment has two modes, i.e., high-frequency bird repelling and night laser bird repelling, which can be automatically turned on when taking off and landing, so as to avoid potential safety hazards caused by flying birds to the drone.

○Unique laser-guided warning function

At night, in the face of emergencies such as intrusion or temporary maintenance, the laser guidance module can provide high-power laser warning and drive away the intruders, provide laser guidance for maintenance personnel, and calibrate the accurate location of the field airport.

○Remote two-way intercom function

The two-way intercom function of SA150 ensures smooth communication between background management personnel and the site when intruders are driven away and maintenance personnel work on the site.