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微信公众号



抖音企业号

*In order to continuously improve user satisfaction, the product will continue to be upgraded,
The actual product and promotional materials may be different, please refer to the final actual product.

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WK-AC50 Mini Drone Automatic Airport Enabling drones to fly fully automatic

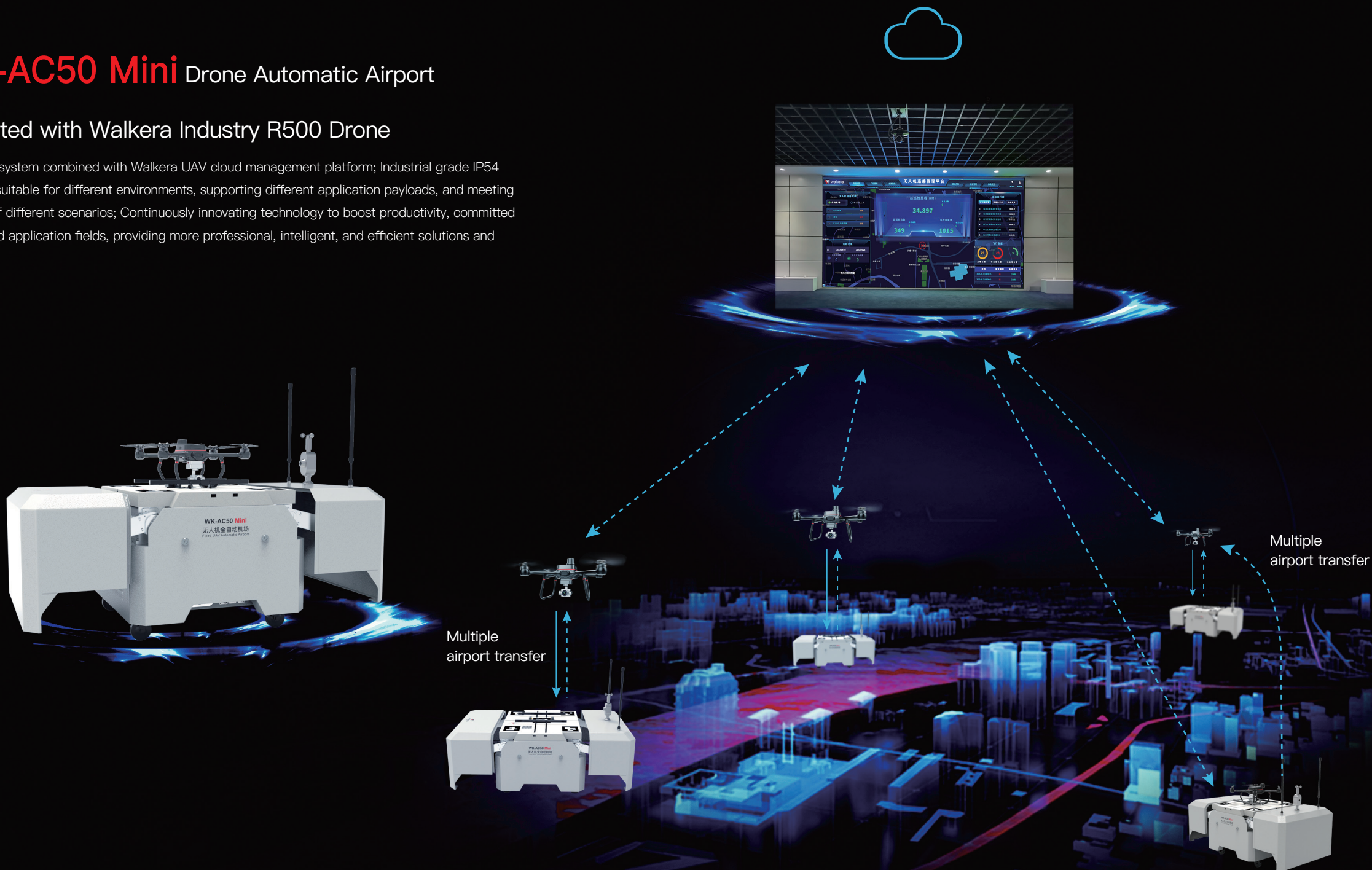


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WK-AC50 Mini Drone Automatic Airport

Integrated with Walkera Industry R500 Drone

A complete system combined with Walkera UAV cloud management platform; Industrial grade IP54 protection, suitable for different environments, supporting different application payloads, and meeting the needs of different scenarios; Continuously innovating technology to boost productivity, committed to unmanned application fields, providing more professional, intelligent, and efficient solutions and services.



Autonomous



Flexible deployment



Remote management



Automatic charging

Industry Application Drones

Fixed drone fully automated airport system platform

The Walkera WK-AC50 Mini fixed drone fully automatic airport achieves fully automatic unmanned operation, automatic charging, remote control, and fully autonomous flight operations. Save labor costs, release labor, respond quickly, and improve productivity.

Autonomous

Autonomous , drone automatically take off from the nest, perform inspection mission, land and charge. The inspection data is automatically uploaded to the i-Cloud server without manual intervention.

- Instead of manual inspection
- Stable and reliable, low cost

Full automatic patrol inspection

Realize full-automatic / precise landing, automatic cruise, timed cruise, accurate replay, support real-time video, and meet the high-frequency, continuous and normalized patrol inspection operation of UAV.

- Automatic precise landing
- Automatic charging

User management platform

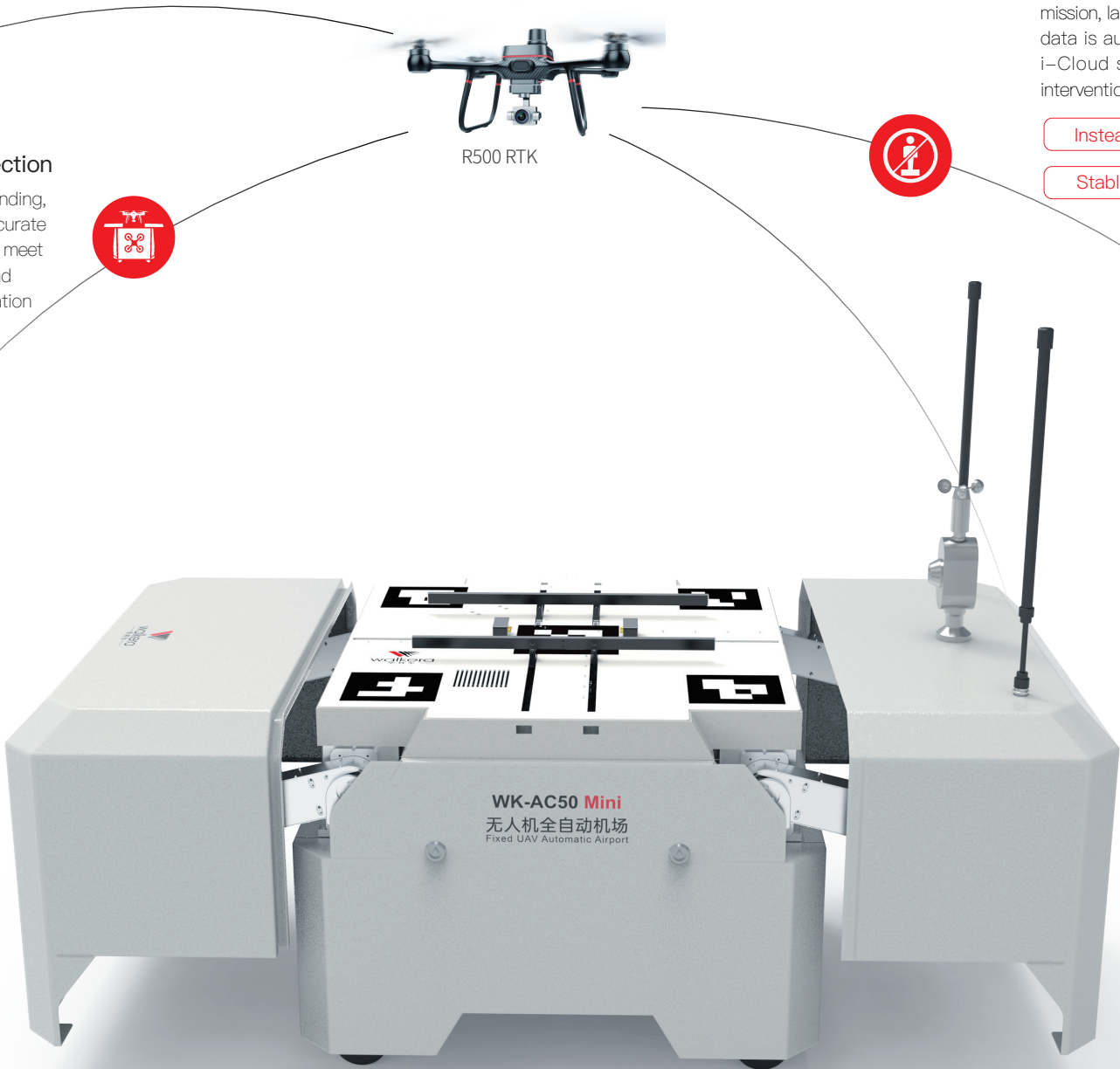
Support to create the different types of users, to storage the flight data of the UAV, automatic airport and the payload, to review the historical missions and edit the saved missions. It's convenient for later data reference and call.

- Rapid response by 24/7
- Provide all-round guarantee

5G remote real-time image monitoring

Adopted by 4G/5G network and the UAV cloud management platform,the mini Airport system has accomplished the Web page and GCS (Ground Controller System) to monitor the multi-drones live broadcasting, flight data management, remote multi-terminal supervision, remote control, remote propaganda, mapping and flight, etc.

- Mega data acquisition and analysis



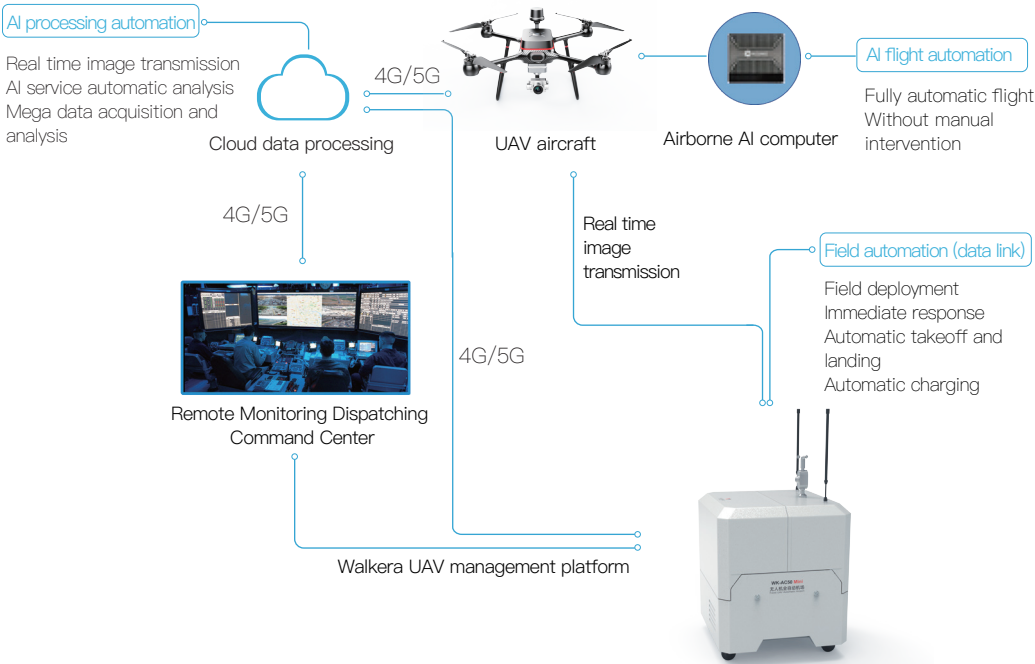
WK-AC50 Mini

Fixed UAV automatic Airport

Walkera Industrial UAV R500

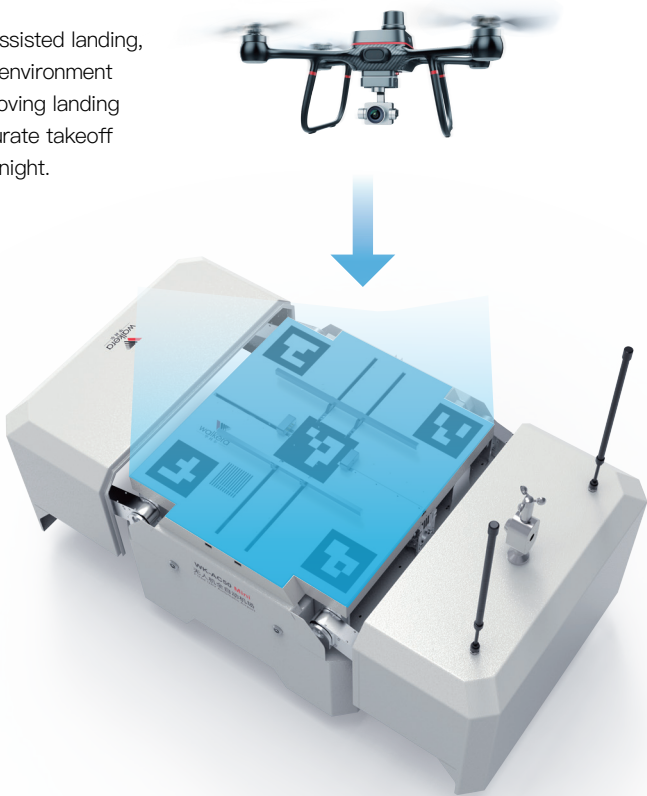
Realize fully automatic flight, precise take-off and landing, remote control and automatic cruise

It is specially developed for patrol inspection applications such as police reconnaissance, power grid and river cruise. Through 5G remote control system, it can fully automatically realize the accurate take-off and landing, charging and continuous patrol inspection of UAV during operation without manual control and intervention.



Precise takeoff and landing

The FC supports QR code assisted landing, through RTK and intelligent environment perception technology, improving landing accuracy, and ensuring accurate takeoff and landing of UAV even at night.





R500 RTK

R500 RTK UAV, the fuselage of lightweight carbon fiber fuselage design, light weight for frame, ready to fly. 50 minutes flighttime with Grade 7 wind resistance.

Multiple payloads


6K camera


Dual lens camera



10 KM

Range

The coverage radius is 10km, the maximum wind resistance is 17m/s(about 7 grade wind)



Automatic charge

The power charge time is less than 1 hour and the operation interval is less than 1 hour, automatic hibernation and wake-up drones



24H

Fully Autonomous on duty by 24/7 , supporting accurate landing at night and rapid response to tasks



Meteorological perception

The weather station can measure wind speed, wind direction, rainfall, temperature, humidity and air pressure



Intelligent temperature control

The integrated temperature control system , ensure the cooling and heating constant temperature.Working environment temperature: - 25 °C ~ 60 °C



Standard of protection

The whole machine has IP54 protection standard and water proof and rainproof design to ensure the safe operation of electrical equipment in rainy days and adapt to complex working environment



5G remote control

Ensure real-time communication, monitoring and dispatching of remote command center; The data will be automatically uploaded to the cloud through 5G network server and command center



Multi airport cooperative operation

Support multi airport networking, communication relay and multi machine cooperative patrol operation.

Drone Management Cloud Platform System

Through Walkera unmanned drone cloud management platform system, users can log in and control their devices at any time, and execute sudden complex flight commands through the ground station. The platform can develop patrol missions for different application scenarios, achieve different flight modes and acquisition methods, and issue tasks through the control system to obtain real-time video data.

- Real-time remote control
- AI intelligent analysis
- Data Push

Real-time remote control of automatic charging, UAV take-off and landing, flight trajectory, PTZ angle, etc. is realized through 5G unlimited by distance and region.

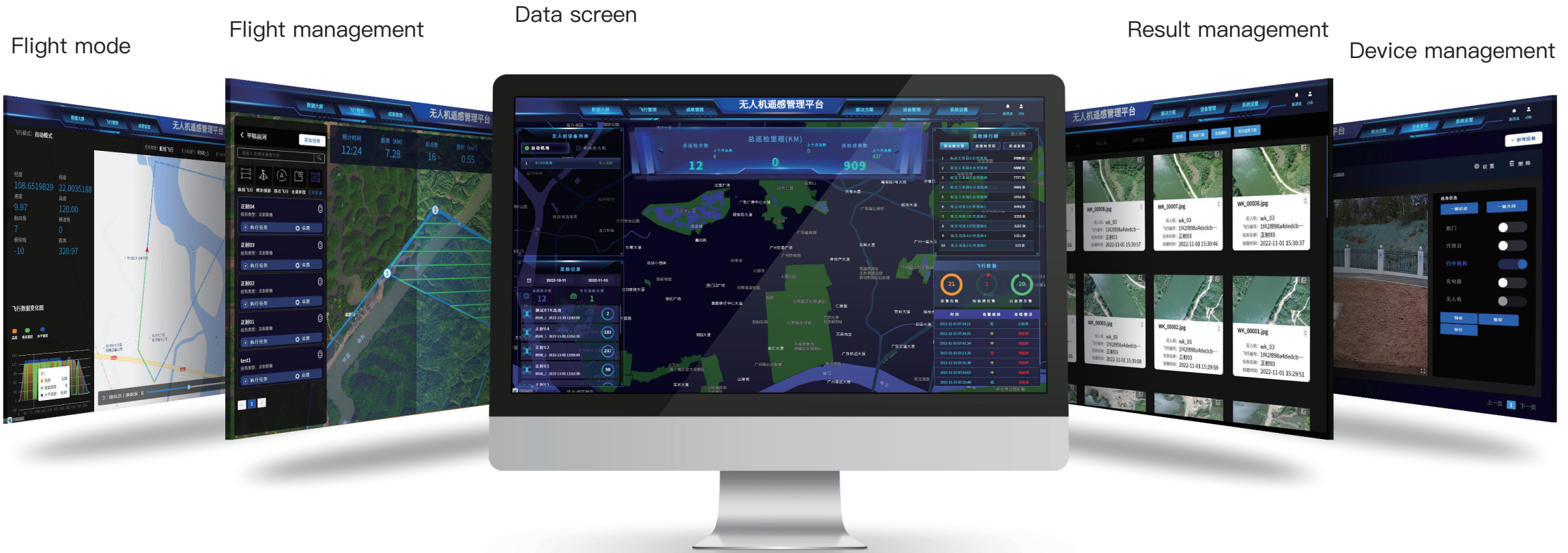
Provide data analysis and precise identification functions for multiple scenarios in different industries to assist users in decision-making.

The data analysis results generated by identification can be accurately targeted and pushed according to the different fields under the jurisdiction of the incoming department, achieving data isolation.

- Automatic / manual switching
- Diversified tasks setting

The UAV control mode is equipped with one button switching function, which can temporarily switch the manual control of UAV and camera PTZ due to emergencies during mission inspection, and also can switch back to automatic flight mission at any time.

Multi tasks complex scene setting, which can set flight patrol information such as track, waypoint, angle and patrol target.



Industry applications



River inspection



Electric power line inspection



Traffic inspection



Forest inspection



Smart City



Petroleum pipeline inspection



Photovoltaic power inspection

Technical Parameter



WK-AC50 mini Airport System	
Airport	
Total weight	less than 100kg
Total power	350W average
Parking platform size	600x600mm
Equipment size	
Hatch opening	1412mm×670mm×701 mm(long × wide × High)
Hatch closure	740mm×670mm×913 mm(long × wide × High)
Protection Grad	IP54
Delivery time	≤37s
Warehousing time	≤65s
Power supply method	AC power
Operation Temperature	-25℃~80℃
Drone power supply	automatic drone charging
Charging current	5A
Charging time	33 minutes (from 30% to 80%)
Monitor	External camera
Working mode	Manual Operation/unmanned Operation
Semiconductor refrigeration fan	
Power supply voltage	DC 12V
Total power consumption	135W
Cooling power	100W
Temperature protection	80℃
Monitor	
Product model	Webcam 500W pixels
Sensor type	1/2.5 low illumination CMOS
System structure	Dual core 32-bit DSP (XM550AI)
Video processing	H265AI/H265+(compatible with H264)
Image output	Main stream: 2592 * 1944 500W 15fps Sub stream: 704 * 576 25fps
Lens	2.6mm
Focusing	manual focusing
Shutter	1/50s ~1/100000s
Low illumination	0.01lux
Dynamic	Digital Wide Dynamic
Noise reduction	Supports 2D/3D noise reduction
Communication interface	1 RJ45 10M/100M adaptive Ethernet port
Support Protocol	ONVIF
Reliability	Comprehensive lightning protection, in compliance with national standards.
Power supply	DC12V/2A
Power consumptio	3W
Working temperature and humidity	-30℃~70℃



Anemometer sensor	
Model number	HSTL-FSM101
Measurement range	0~30m/s
Power supply voltage	DC 12~24V
Signal output	Voltage :0~5V, current :4~20mA digital :RS485(232)
Sensor style	three cups
Starting wind speed	0.4~0.8m/s
Resolution	0.1m/s
Systematic error	±2%
R500 RTK quadrotor UAV	
Model	R500 RTK quadrotor UAV
Smart battery	22.2V 7000mAh LiPo 6S
Normal takeoff weight	1.38 kg (including battery)
Maximum takeoff weight	2.0 kg (near sea level)
Maximum rising speed	5 m/s
Maximum descent speed	3 m/s
Maximum horizontal flight speed	GPS mode: 5m/s Cruise mode: 10m/s (5~20m/s adjustable) 15m/s (in a calm environment)
Maximum tilt angle	35°
Maximum rotational speed	150°/s
Maximum allowable wind speed	17 m/s
Maximum battery life	approximately 50 minutes (with camera head mounted, sea level)
Maximum flight altitude	4500m
Recommended working environment temperature	-10℃至+40℃
Positioning accuracy	GPS: 垂直±1.5 m, 水平±0.4 m (GPS定位正常工作)
Cooperate with network RTK	level: 1cm+1ppm; Vertical: 2cm+1ppm (GPS positioning is working properly, network RTK connection is normal)