Electric VTOL fixed wing UAV-Aerial survey version

1. Features

Modularization

Single lens camera/ Multi lens camera

Long endurance 100min flight time Intellectualization Fly mode according to terrain fluctuation

Security One-click take-off and landing

Multi-redundant Multi-redundant navigation control system

High efficiency No ground phase control point, which can meet the surveying and mapping standard requirement of 1:500 Simplification One-click data import

High precision Real time differential technology based on 100HZ RTK

2. Technical index

The fuselage of UAV

Texture of material	EPP fuselage,Carbon fiber frame
Wingspan	220cm
Length	130cm
Standard take-off weight & load	6.7kg(with payload)
Maximum flight time	100min
Mode of Take-off and landing	Vertical take-off and landing
Precision of recovery landing point	<1m
Promotion mode	Electric compound wing forward pull propulsion
Flight speed	70km/h
Maximum control radius	10km
Wind resistance	Level 6
Altitude of departure point	Above 4000 meters
Operating temperature	-20°C-45°C

GNSS

Channel number	226 channel

Signal tracking	GPS L1 C/A, L2C,L2P(y),GLONASS L1/L2, GALILEO E1
The update frequency of RTK	100HZ
The accuracy of RTK	Horizontal:10mm+1.0ppm,vertical: 15mm+1.0ppm

3. Survey Process Software

Route planning

Automatic flight path planning;Rich flight path types

Strip route: Suitable for road, river, power, pipeline, etc

Polygonal route: suitable for large area conventional flight missions



4. Application scenarios



UAV drone for sale,UAV surveying and mapping plays an important role in the field of land surveying and mapping because of its flexibility. Through the rapid acquisition of mapping UAV aerial photography data, we can quickly grasp the details of the survey area, which can be applied to land and resources dynamic monitoring and investigation, land use and coverage map updating, land use dynamic change monitoring, feature information analysis, etc. high resolution aerial images can also be applied to regional planning, etc.



Remote sensing UAV can be applied to power line selection, highway line selection, railway line selection and oil line selection. It can quickly obtain the aerial image of linear UAV and provide design data for line selection according to the needs of the project. In addition, remote sensing UAV can also carry out line selection design and comprehensive monitoring for oil and gas pipelines. Centimeter level aerial images and high-definition video can assist in safety monitoring and management. At the same time, pipeline pressure data combined with images can be used to detect pipeline leakage, theft and other phenomena.

Route selection





Emergency



Agriculture and Forestry

Efficient and fast acquisition of high-resolution aerial images can monitor environmental pollution in time, especially in the aspect of sewage pollution. In addition, marine monitoring, oil spill monitoring, water quality monitoring, wetland monitoring, solid pollutant monitoring, coastal zone monitoring, vegetation ecology and other aspects can be implemented with the help of aerial image or video data taken by remote sensing UAV. Among them, water quality investigation and monitoring, pollutant monitoring, atmospheric environment monitoring, solid waste detection and straw burning prohibition monitoring are the main application directions.

UAV has been paid attention to in the field of Surveying and mapping, starting from the emergency relief. Whether it is Wenchuan earthquake, Yushu earthquake, Zhouqu debris flow, Ankang flood, mapping UAV arrived at the scene at the first time, and gave full play to the characteristics of mobility and flexibility to obtain the image data of the disaster area, which played an important role in disaster relief deployment and post disaster reconstruction.

High resolution aerial images can provide accurate information of land texture and crop classification, and can be applied to agricultural land analysis, crop type recognition, crop growth analysis, soil moisture measurement, agricultural environment investigation, aquaculture area monitoring, forest fire monitoring, forest coverage analysis, forest vegetation health monitoring, forest storage assessment, etc. It can determine the planting area, growth status, growth stage and output value of specific agricultural crops, for example, it plays an important role in tobacco, agricultural Internet of things and other industries.