

*Welcome*



Ursa Aeronautical Technology Co., Ltd.

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# About us

Ursa Aeronautical Technology Co., Ltd.(UAT) was established in November 2017, located in Chengdu, Sichuan Province.

UAT is professionally engaged in developing, manufacturing, selling, operating large-scale UAV and general aviation aircraft.

UAT was issued the DPA No.0001 (design and production approval) by CAAC in Nov. 27, 2020.



# About us

## The leader in the large-scale UAV industry

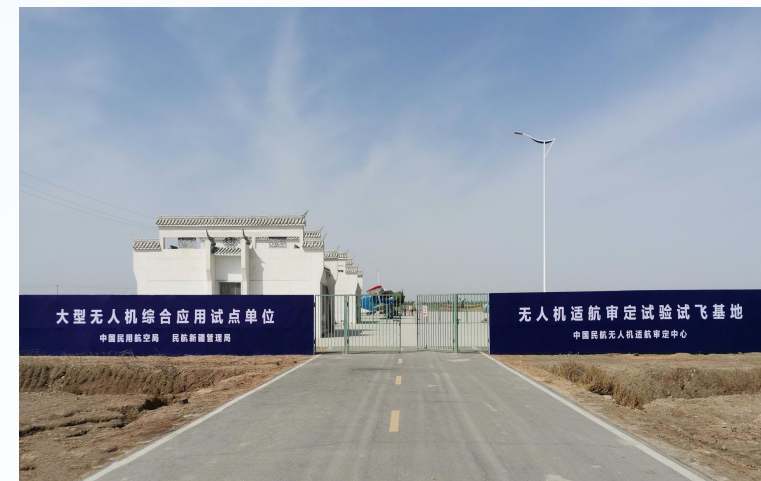
UAT is the only company that get the of large-scale UAV operation approval in China.

UAT cooperates with professional, advanced national institutions for UAV development in China.



## The standard setter for the large-scale UAV industry

UAT participated in drafting the standard of large-scale UAV airworthiness certification, contributing to the foundation of China's large-scale UAV industry as a standard setter.





# Our product: HY100



The large, multifunctional, fixed-wing UAV model, **HY100**, developed by our company, has been approved by CAAC in November 27, 2020.

HY100 is the **first** and the **only** large-scale UAV approved by CAAC at present.

HY100 has been already applied in different scenarios.



# Our product: HY100

## Parameters

Width	18.176m
High	6.097m
Length	12.688m
Distance between front and rear wheels	8.060m
Front landing gear width	3.360m
Propeller diameter	3.600m
Cabin length	4.10m
Cabin height	1.80m
Cabin width	1.60m
Cabin volume	15m <sup>3</sup>
Door width	0.81m, 1.493m
Door height	1.419m, 1.590m



# Our product: HY100



## Performance

Maximum take-off weight	5250kg
Maximum landing weight	5200kg
Empty weight	3350kg
Maximum load	1900kg
Center of gravity	22%~31%bA
Operator at least	2
Crew at least	2
Maximum flight distance	1560km
Maximum flight time	10h
Distance of takeoff roll	110m
Distance of landing	175m



# Our product: HY100

## Performance

Maximum level flight speed .....256km/h

Ceiling.....4500m

Flight speed 1: 130km/h~190km/h (can turn, accelerate,climb)

Flight speed 2: 190km/h~220km/h (only level flight)

Maximum wind speed at take off 1: 13m/s

Maximum wind speed at take off 2: 6m/s(when the wind is vertical to the takeoff direction)

Maximum wind speed at take off 3: 8m/s(when the angle between the wind and the takeoff direction is 45°)





# Application scenarios

## Aviation logistics

- The payload of HY100 is **1900kg**.
- When the transport distance is less than 300km, the control station transmits data by L-band and U-band system.
- When the transport distance exceeds 300km, the control station transmits data by SATCOM or transfers the control of UAV from station to station.
- It can realize 24hours constant flying beyond traditional pilots limitation.



Cooperation with JD Logistics



Cooperation with Zhongtong Logistics



Delivery at night



# Our product: HY100

## Flight control system

- One button start
- Double redundancy flight control & manage computer (FCMC)
- Make UAV fly autonomously, and keep it under control

## Signal transmission system

- Signal transmission system is made up of responder and data link
- Effective distance over 200 km(radio channel)
- Operating frequency: band L
- Or SATCOM equipment



# Application scenarios

## Agriculture and forestry protection/planting

- HY100 can be equipped with approved agricultural system including spraying equipment, sowing equipment and emergency delivery equipment.
- With great performance of very low speed and low altitude, it's perfect for insect spraying and agriculture or forest planting.
- The agricultural equipment can carry 1000kg of stuff. The operational area of a single flight can over 300 acres.

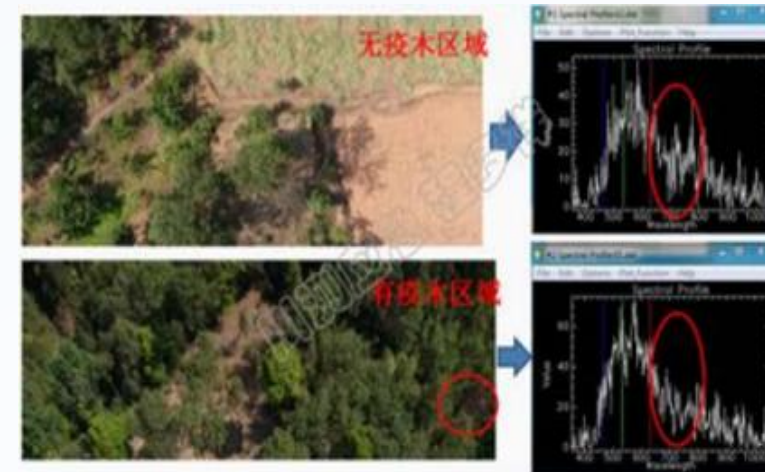




# Application scenarios

## Agriculture and forestry monitoring

- HY100 can be equipped with electro-optical pod.
- Electro-optical pod can identify plants for pests and diseases.
- Electro-optical pod can identify the growth stage of the plants, which is helpful to analyze plant growth and expected harvest.





# Application scenarios

## Aerial photo, patrol and fire warning

- Visible light: Under the condition of daytime visibility of 15km, the electro-optical pod on HY100 can recognize a target of 4m×6m beyond 10km.
- Infrared: Under the conditions of nighttime with visibility of 15km and relative temperature greater than 60%, the electro-optical pod on HY100 can recognize a 4m×6m target beyond 8km with a temperature difference of 3K .
- Laser: Under the condition of 15km visibility, the distance of laser irradiation and ranging is more than 10km.

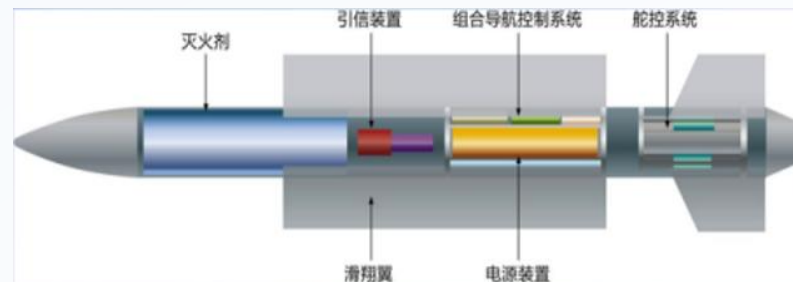
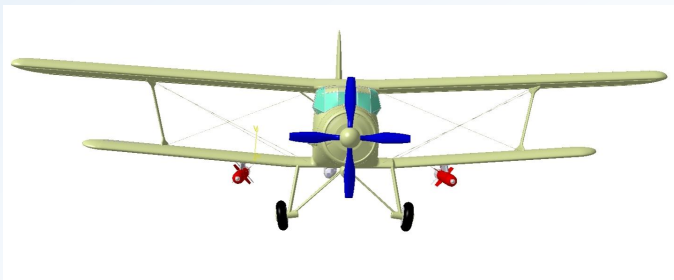


# Application scenarios

## Fire extinguishing bomb dropping

- HY100 can be equipped with 2-4 fire extinguishing bombs to extinguish fire very quickly.
- There are several types of bombs for options.

Fire bomb model	launch altitude	Flight distance	Extinguishing agent loading	Effective area	Fire bomb loading
Type 20	100~1500m	≤2km	15~16kg	300m <sup>2</sup>	50~80
Type 50	100~4000m	≤4km	42~43kg	460m <sup>2</sup>	25~35
Type 100	100~8000m	≤10km	82~84kg	1000m <sup>2</sup>	10~15
Type 200	100~8000m	≤10km	178~180kg	1000m <sup>2</sup>	5~8



# Application scenarios

## Aerial delivery

- With a payload of 1900kg and large cabin, HY100 can realize a massive air drop for staff supply.
- The performance of low altitude and low speed makes the staff drop much easier.
- Applicable to various civil or military scenarios.





# Contact us



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*Thank you*

The background is a deep blue gradient. It features several decorative elements: a series of thin, vertical lines of varying heights, each topped with a small, glowing blue dot; a set of thick, wavy, overlapping bands in shades of blue and purple that curve across the bottom of the frame; and a series of thin, parallel lines in the bottom right corner that create a sense of depth and movement.