

HARDWARE PARAMETERS

	Foundation	SurvY	3D Mapping	Environmental	Video
Applications	Platform	Mapping/line inspection	3D modeling	Environmental monitoring	Security inspection
Wingspan	2500MM				
length	1190MM				
Take-off weight	6.95KG~8.5KG	6.95KG	6.95KG	6.95KG	7.5kg
data link	20km @point to point				
	Infinite @ 4G LTE /Optional				
Standard payload		A 7R SEREAIL	DG3 (24MP*5)	6gas sensor+24MP camera	10X Full HD +tracker
Optional camera	Sony a 7R	Rx1Rm2+35mm	Flytouav A5 (million pixels *5group)	Pirot Multispectral flir640*512Thermal imager	30X + thermal camera+tracker

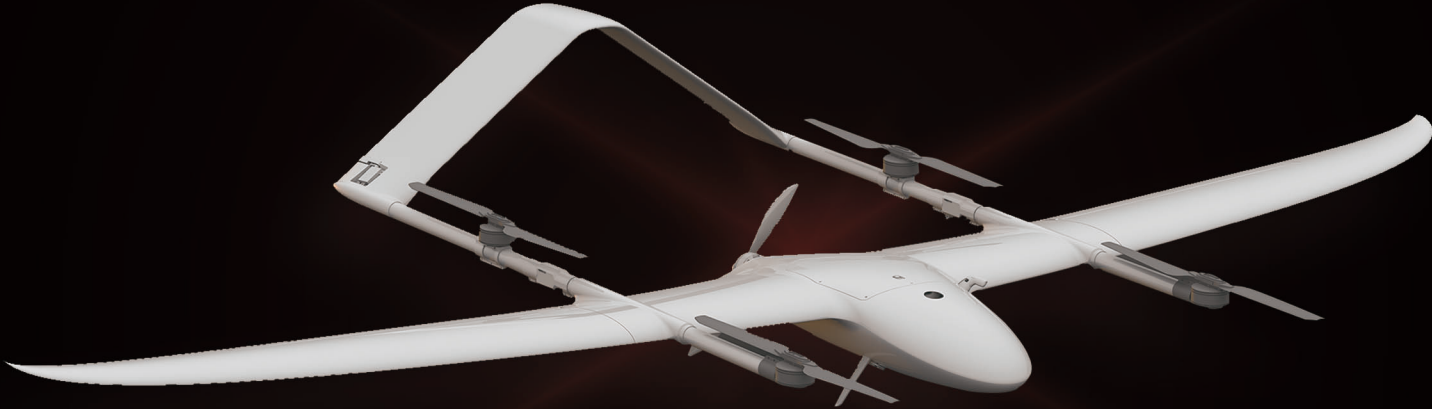
PERFORMANCE PARAMETER

Video transmission	Support for real-time 4G_LTE datalink(optional)					Point to point transmission Real time 4G_LTE (optional)
3D map of GCS	supported					
Auto mission	supported					
Cruise Speed (Sea level)	18m/s (68.4km/H)					
Rate of climb (MAX)	4m/s					
Rate of climb (sea level)	2m/s					
wind resistance (sea level)	8m/s@VTOL; 12m/s@					
Advice endurance (sea level)	165MIN	165MIN	155MIN	155MIN	150MIN	
Voyage	180KM/165KM	180KM/165KM	Cruise 170KM/155KM	170KM/155KM	165KM/150KM	
navigation accuracy	0.15m@Copter; 1m@Fixedwing					
Ceiling@Copter	4800m					
Ceiling@fixwing	6800m					

SINGLE SORTIE FLIGHT AREA

European standard 120 meters high	A7R+24mm @2.4cm GSD : 5.8km2 @75%sidelap/15km2@40%sidelap	3.2km2@80sidelap (still day)	3km2@75%sidelap 8km2@40%sidelap	N/a
2.5cmGSD 42Million H195m	6km2@75%sidelap/16km2@40%sidelap	3.5km2@80sidelap (still day)	4.8km2@75%sidelap 13km2@40%sidelap	
5cmGSD 42Million H385m	12km2@75%sidelap/32km2@40%sidelap	7.5km2@80sidelap	9.75km2@75%sidelap 26km2@40%sidelap	
10cmGSD42Million H770m	24km2@75%sidelap/64km2@40%sidelap	15km2@80sidelap	19.5km2@75%sidelap 52km2@40%sidelap	

飞图 FLYTOUAV®



Aircross 6  
横空™ Air 空气

Guangzhou FLYTO technology co. LTD



Guangzhou FLYTOUAV information technology co. LTD



# SECURITY POLICY

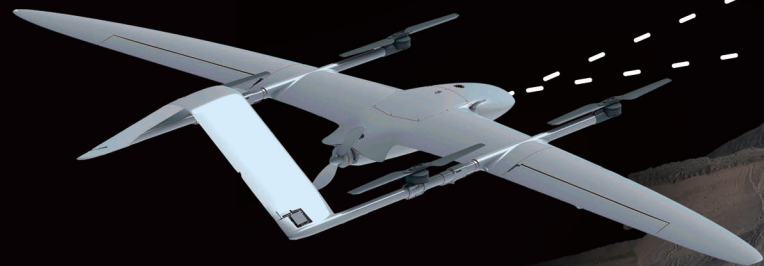
## 安全策略

◆ There are 28 automatic emergency program in the autopilot, which greatly reduces the experience requirements for Pilots:

- Forward terrain obstacle avoidance
- Auto-windward while landing
- Automatic switching of two airspeed sensors
- Automatic calibration of airspeed ratio
- Compass less navigation
- Independent dynamic electricity management
- Power System Feedback
- Bingo point

◆ Hardware redundancy

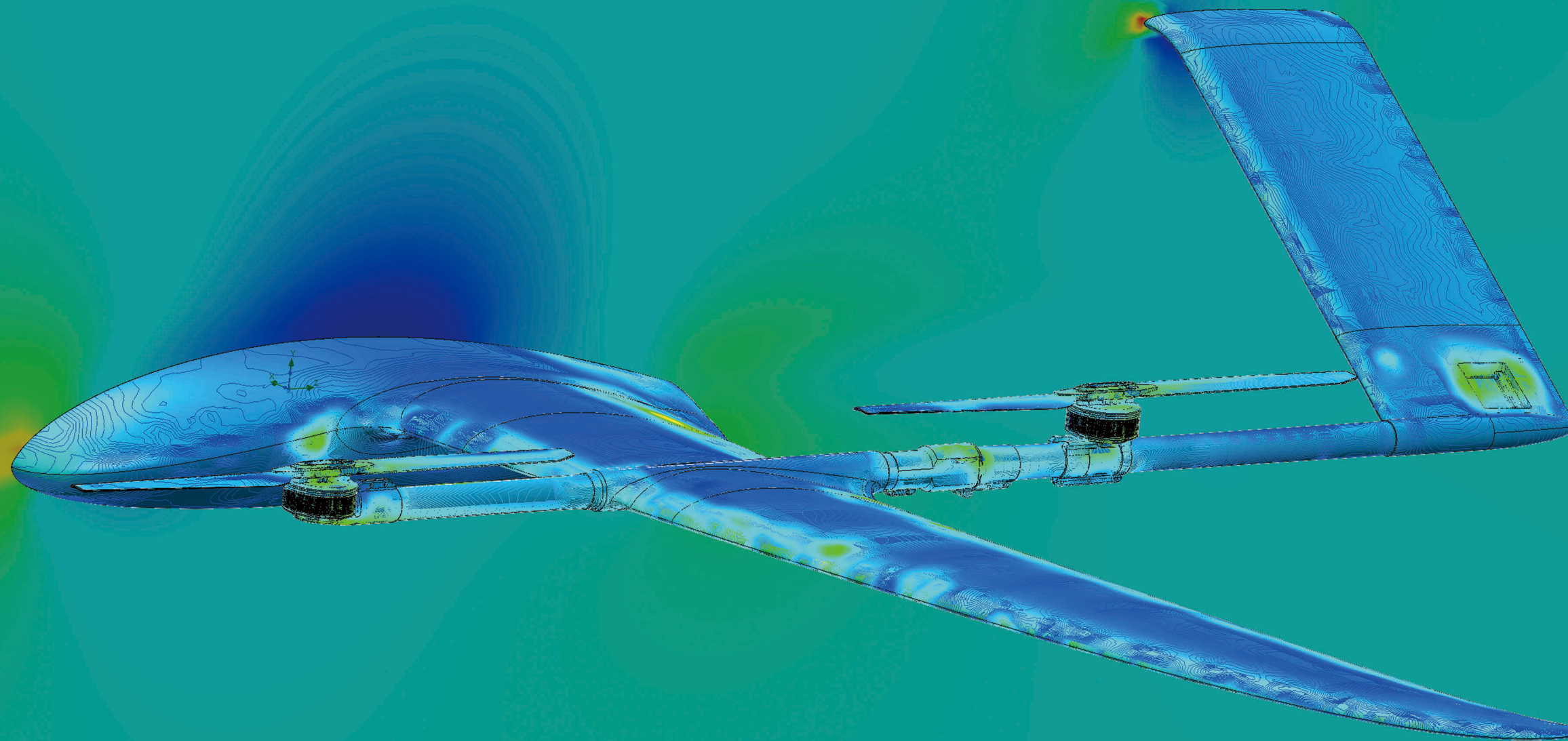
- 3 IMU
- 2 compass
- 2 GPS
- 9 BEC for power management





# OPTIMUM AERODYNAMIC 最优气动

- ◆ Bionic spoiler
- ◆ Lifting fuselage
- ◆ Propeller locking

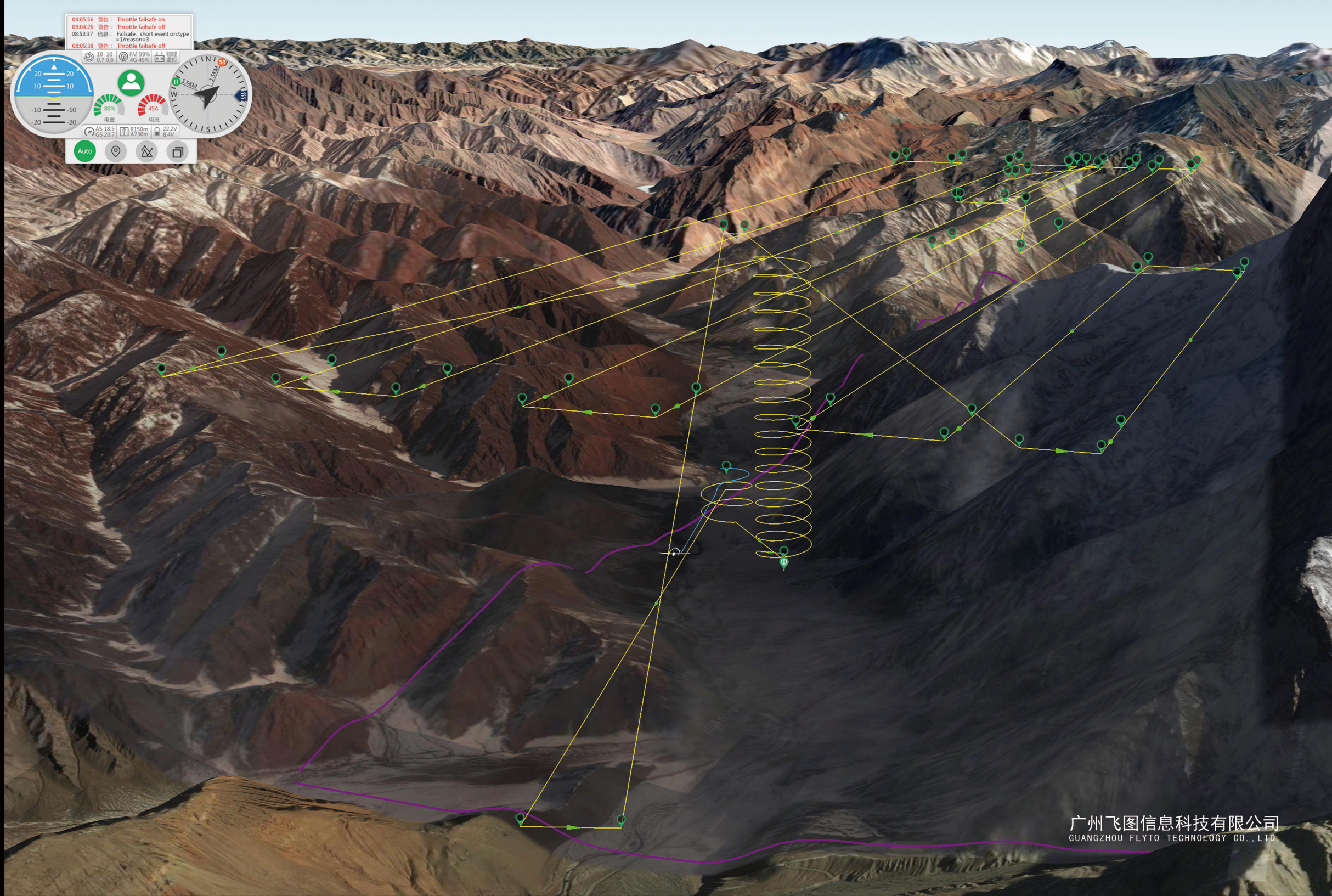




# INTELLIGENCE GCS

智能地面控制站

- ◆ 3D map of GCS
- ◆ Radio Visual Analysis
- ◆ 1:1 Simulation flight
- ◆ Minimal Control Interface
- ◆ Route Automatic Encryption
- ◆ Image overlap rate simulation
- ◆ Wind Field Data and Meteorological Environment Simulation





# SEAWORTHINESS<sup>7</sup>

适航性能

- ◆ With its superb aerodynamic design, Aircross 6 Air meets the airworthiness requirements of 4800 m ALT vertical takeoff and landing and 7500 m ALT cruise
- ◆ It also meets the requirements of safe take-off and landing of Class 5 wind (8m/s) and safe cruising and Airworthiness of Class 6 wind (12m/s)
- ◆ When using the battery heating system, the minimum operating temperature is minus 15 degrees Celsius

\*The case on this page is a 3D model of Manganese Mine captured by Aircross 6Air in Kashgar City. The area is 40 square kilometers, the highest altitude is 5600 m, The take-off place is 3100 m, and the highest altitude of the route is 6590 m



VIDEO  
INSPECTION

视频监控吊舱



BASIC PARAMETERS

model	G10T-30X	G20T-30X35	G20T-30XL10	G30T-10X20L10
weight	540G	630G	620G	586G
Memory	16G	16G	16G	16G
pitch	+45° to-135°	+45° to-135°	+45° to-135°	+45° to-135°
course	360° ×N	360° ×N	360° ×N	360° ×N
Stability accuracy	0.01°	0.01°	0.01°	0.01°
Camera lens	30×Optical zoom	30×Optical zoom	30×Optical zoom	10.5X Optical zoom
sensor	Sony Star CMOS Sensor	Sony Star CMOS Sensor	1/2.8 CMOS Sensor	1/3 inch CMOS
Image format	FHD, 1080P@30	FHD, 1080P@30	FHD, 1080P@30	1080P@30
FOV	63.7° to2.3°	63.7° to2.3°	63.7° to2.3°	62° to6.5°

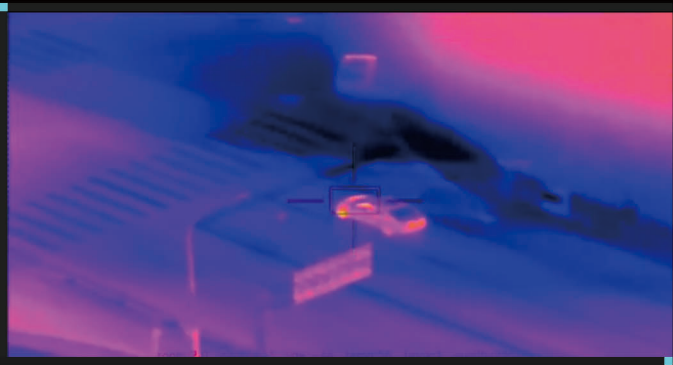
THERMAL IMAGER

pixel		640×512		640×512
focal length		35MM		20MM, F1.0
FOV		17°		24.6° ×19.8°

LASER RANGING

Measurement range			3.5-1000M	3.5-800M
Measurement resolution			0.2M	0.1M
measurement accuracy			2M	1M

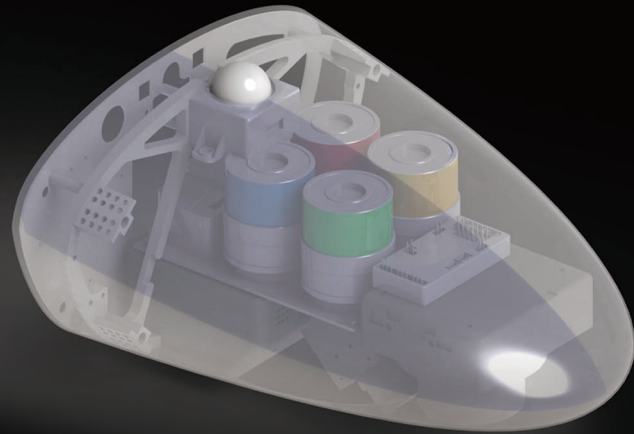
◆ Aircross 6 Air support a variety of payload to achieve day and night monitoring, precise positioning and ranging of target matching image the point-to-point FM datalink transmission range is from 10 km to 50 km,





# ENVIRONMENTAL PAYLOAD

## 环境监测吊舱



◆ Dozens of square kilometres can be monitored in a sortie

The types of gases that can be monitored are as follows

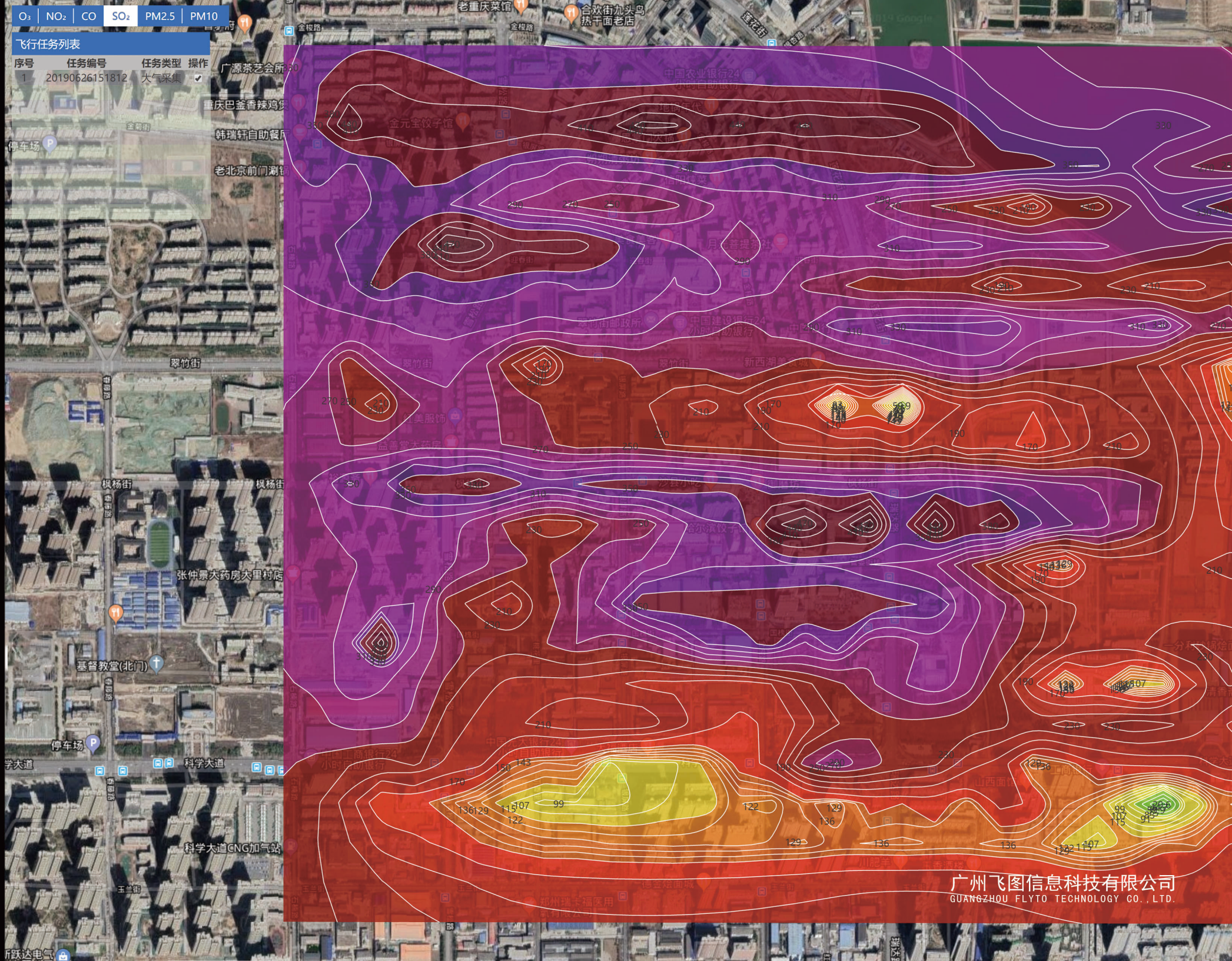
**O3、No2、SO2、CO、PM2.5、PM10**

◆ Optional thermal cameras for day and night observation

quick locking of the emission points of waste gas or wastewater,

Optional multi-spectral cameras for further analysis and  
evaluation of water and soil pollution.

\*The case on this page is that on June 26, 2019, Henan Tianteng co.LTD used the Aircross 6 Air with an air monitoring pod for Law enforcement surveillance in Zhengzhou City collecting six kinds of gas indicators of 150 m/200 m/250m altitude with an area of 12 square kilometers.





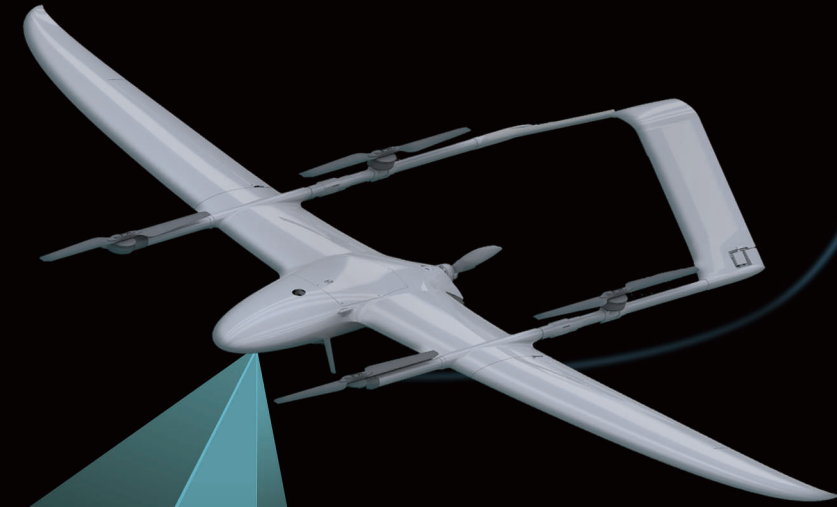
# PIPELINE INSPECTION

管线巡检

## Elimination of Rotation Deviation Angle

- ◆ The Aircross 6Air capture images without pitch and roll deviation while mounting 3 axes gimbal
- ◆ The minimum projection area of the side fuselage reduces the image rotation angle. With the help of unique autopilot software, the image direction can completely coincide with the flight path in cross-wind flight..

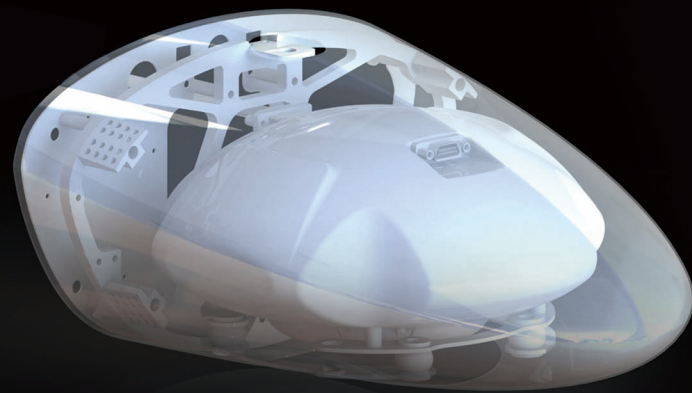
\*The case on this page is the progress monitoring of Huizhou city to Shenzhen city in Guangdong Province. The total mileage is about 90 km. The monitoring frequency is once a month.





## 3D MAPPING PAYLOAD

倾斜摄影吊舱



- ◆ The Aircross 6Air can perform a 3D urban modeling mission with a maximum resolution of 2.2cm/pix.

At a resolution of 3cm/pix, the typical operating area is 12 km<sup>2</sup>/day.



\*The case on this page is in Meizhou City, Guangdong Province, 2019  
with a total area of 23 square kilometers,  
resolution of 3 cm, flight height at 220m.





MULTISPECTRAL  
PAYLOAD

多光谱吊舱

- ◆ The Muli-Spectral pod provides users with more accurate target object distribution map, and more accurate information for the analysis,detection, monitoring and measurement of geological resources, agriculture and forestry, hydrology,marine environment monitoring and other industries.
- ◆ Typical applications include crop growth analysis,PEST analysis and river water monitoring



MULTISPECTRAL PAYLOAD

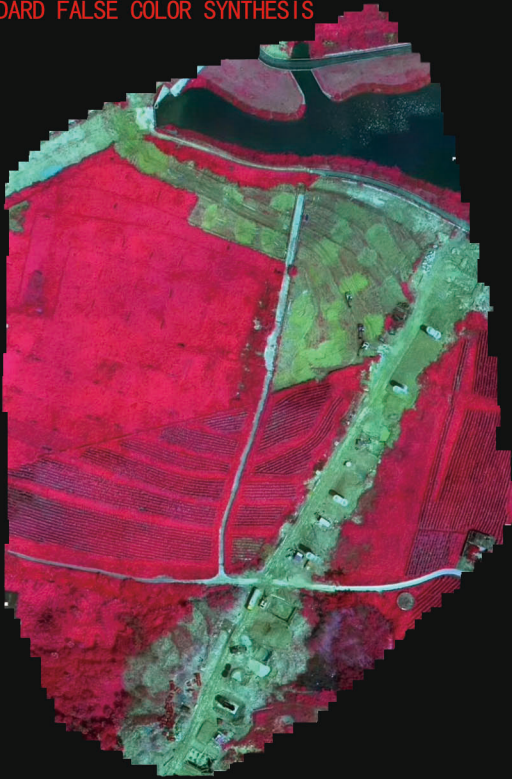
SENSOR	1/3 INCH CMOS; 1.2 MILLION PIXELS; GLOBAL SHUTTER	STORAGE SPACE	64G
FIELD ANGLE	43. 6° HFOV; 33. 4° VFOV	WORKING TEMPERATURE RANGE	-10℃ ~50℃
TYPICAL BROADBAND	96M*72M@H=120M	TRIGGER MODE	EXTERNAL TRIGGER, TIMING TRIGGER, OVERLAP RATE TRIGGER
SURFACE SPATIAL RESOLUTION	7. 5CM@H=120M	ENVIRONMENTAL ADAPTABILITY	SAPPHIRE PROTECTION WINDOW, SCRATCH RESISTANCE, WEAR RESISTANCE, GOOD DURABILITY
BAND RANGE	300NM-1000NM(17 choose 6: 360NM、410NM、450NM、 490NM、530NM、555NM、570NM、610NM、660NM、680NM、 700NM、710NM(Narrow Band/Qualcomm)、760NM 800NM、840NM、900NM、940NM)	PROCESSING SOFTWARE	COMPATIBLE WITH MAINSTREAM SOFTWARE SUCH AS PIX4D, DATA SUPPORT ACCESS TO CLOUD PLATFORM
CONTROL SOFTWARE	WIFI CONNECTION, MOBILE OR PC WEB PREVIEW FUNCTION, CHINESE-ENGLISH INTERFACE	SHUTTER INTERVAL	FAST 1. 5S/TIME

\* EACH CHANNEL WAVELENGTH SUPPORTS CUSTOMIZATION,WITHIN THE RANGE OF 300-1000 NM,

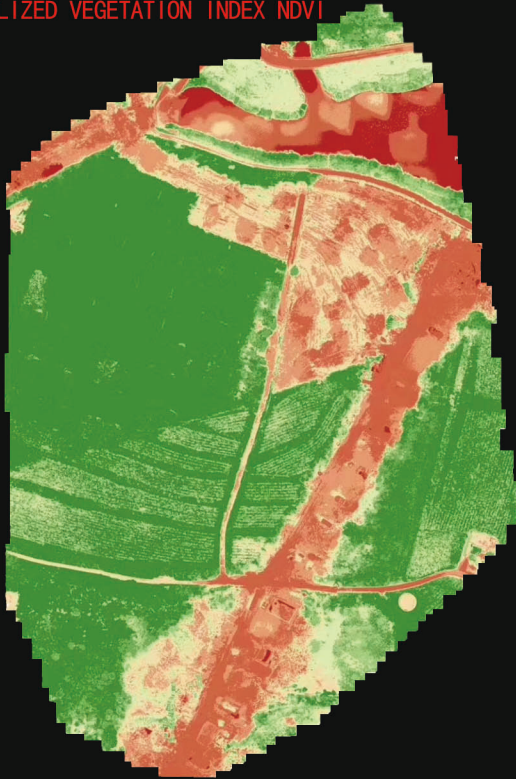
TRUE COLOR SYNTHESIS



STANDARD FALSE COLOR SYNTHESIS



NORMALIZED VEGETATION INDEX NDVI



NORMALIZED WATER INDEX NDWI

