FLIRT

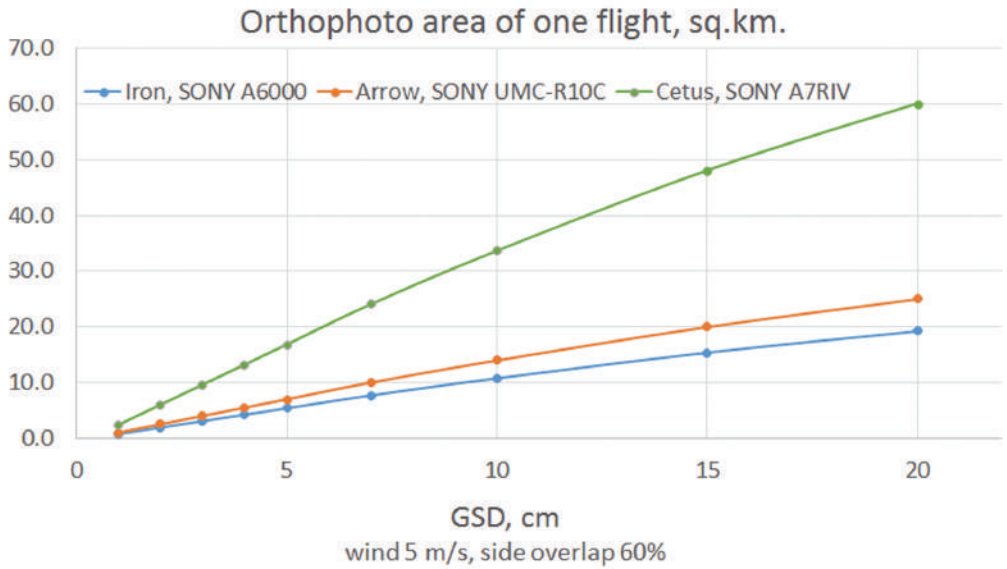
FLYING
INTELLIGENT
ROBOTIC
TOOL

FLIRT is our model range of powerful professional fixed-wing UAVs for aerial mapping, monitoring and other remote sensing applications

PROFESSIONAL APPLICATIONS

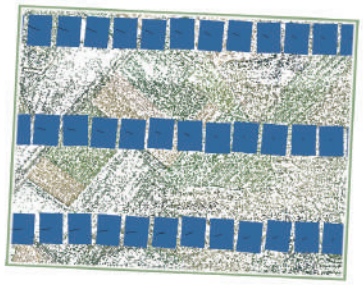
- aerial mapping
- agricultural monitoring
- forest monitoring
- natural park monitoring
- infrastructure objects inspections
- pipelines & power lines monitoring
- aerial reconnaissance
- emergencies
- surveillance & security

FLIRT UAV solutions combine the advantages of unmanned flying systems with **high standards of piloted specialized aircrafts**

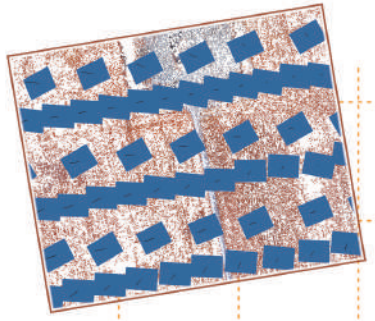


FLIRT UAV key advantages:

- own **smart FlightPlanner** for automatic mission creation
- **fully automatic flight** from takeoff to landing
- **point take-off** and landing
- **exceptional stability in flight** gives well oriented photos
- **wide range** of altitudes and flight speeds
- **long flight** endurance
- distance mission **control up to 40 km by radiolink**



well oriented photos from ABRIS FLIRT UAVs



pictures from many other UAVs

- easily changeable payload
- gyro stabilized camera gimbal
- durable hull composite construction additionally protected with the system of dampers
- doesn't require any special tools and no electrical coupling involved at assembly process
- automatic parachute landing system with emergency activation
- easily transported in specially designed light and convenient cases

FLIRT ARROW

Arrow is a light-weight, hand-launchable model is specifically designed for aerial mapping, video surveillance and aerial reconnaissance

PROFESSIONAL APPLICATIONS

- surveillance & security
- emergencies
- aerial reconnaissance
- pipelines & power lines monitoring
- infrastructure objects inspections
- agricultural monitoring
- forest monitoring
- natural park monitoring
- aerial mapping

Light and mobile ARROW can be launched by one person and successfully operate in the most extreme and inaccessible places

ARROW key advantages:

- Transporting, launch and controlling the mission itself can be easily carried out by a **single person on foot**
- Stable operation even at **high altitudes**
- **Simultaneous video monitoring and aerial mapping** with a high-resolution sensor during flight

SONY UMC-R10C
20 MP camera

FLIR DuoPro
thermal camera

Parrot SEQUOIA
multispectral camera

NextVision
thermal&optical PTZ camera

- Remotely controlled stabilized camera in the nose to get online **HD video up to 30 km ahead**

- High-precision aerial orthophoto and DTM without additional field work due to **precision GNSS L1/L2 PPK system onboard**

- **Covert aerial reconnaissance and surveillance** from high altitude in zero radio emission mode in conditions of active interference and GPS signal suppression.

Technical characteristics:

- **total system weight 8 kg**
- **up to 150 minutes in flight**
- **launch from hand or catapult**
- **parachute landing**
- **GSD from 0.5 cm**
- **up to 150 km flight distance**
- **up to 30 km HD video link**
- **wind tolerance up to 10 m/s**

FLIRT CETUS

Cetus is a highly-specialized aircraft designed for high precision aerial mapping of vast areas. Stabilized camera with full-frame sensor combined with great flight duration allows you to capture extremely big territories in single flight.

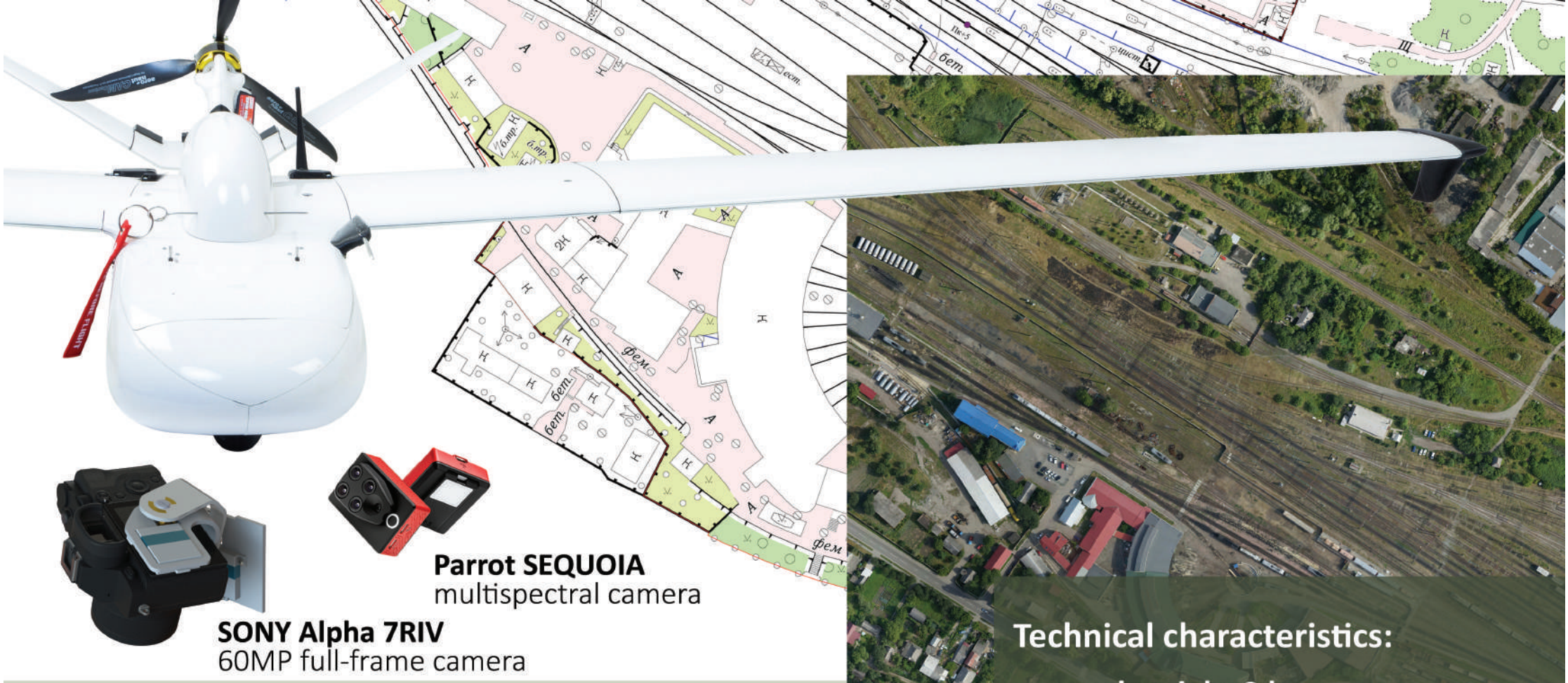
PROFESSIONAL APPLICATIONS

- aerial mapping
- agricultural monitoring
- forest monitoring
- natural park monitoring
- infrastructure objects inspections
- pipelines & power lines monitoring

Due to **60MP full frame camera and big flight time** Cetus may capture **up to 20 sq.km. of orthophoto with 5 cm GSD** in one flight

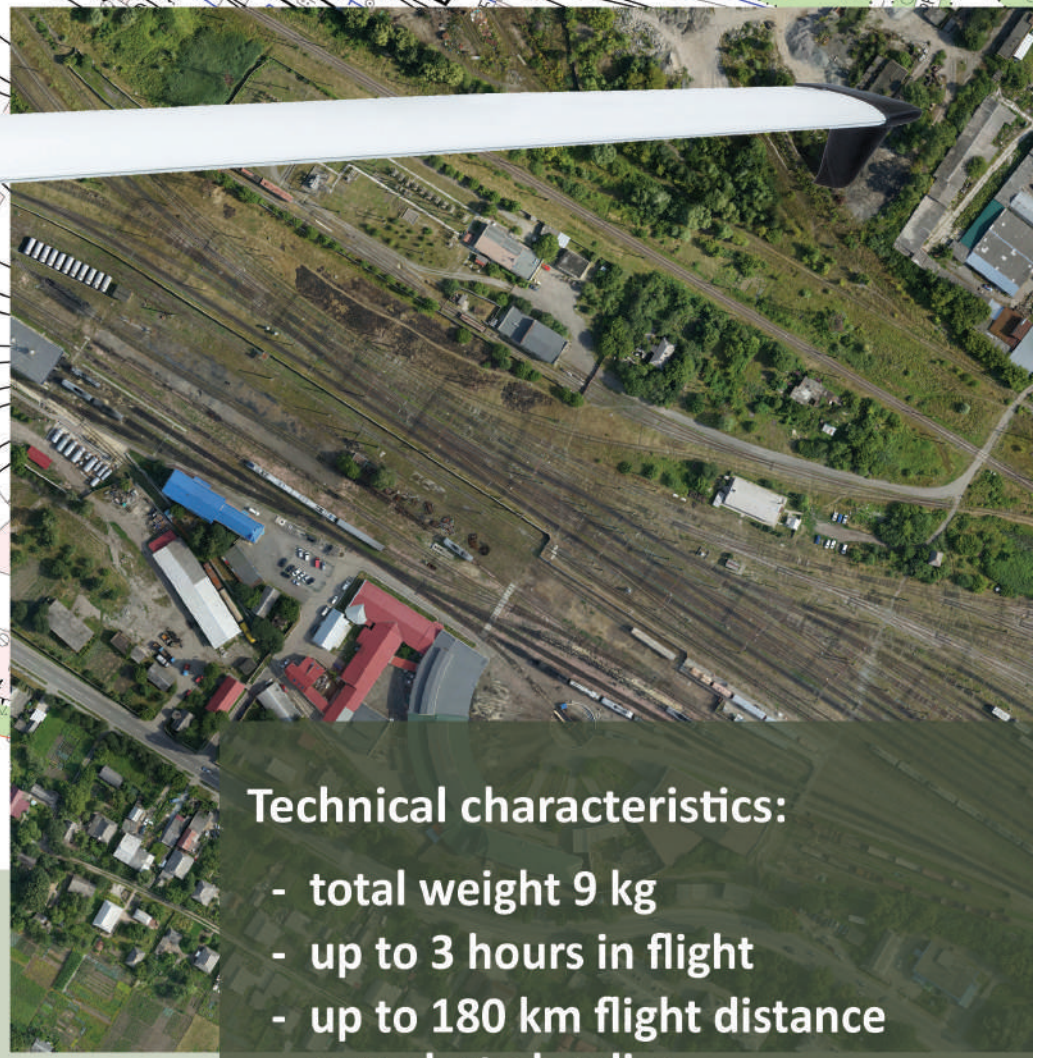
CETUS key advantages:

- High adaptability for different types of tasks thanks to **interchangeable lens system**
- **Gyro stabilized gimbal** allows well-aligned series of pictures
- **Long distance flights** even with strong wind conditions



Parrot SEQUOIA
multispectral camera

SONY Alpha 7RIV
60MP full-frame camera



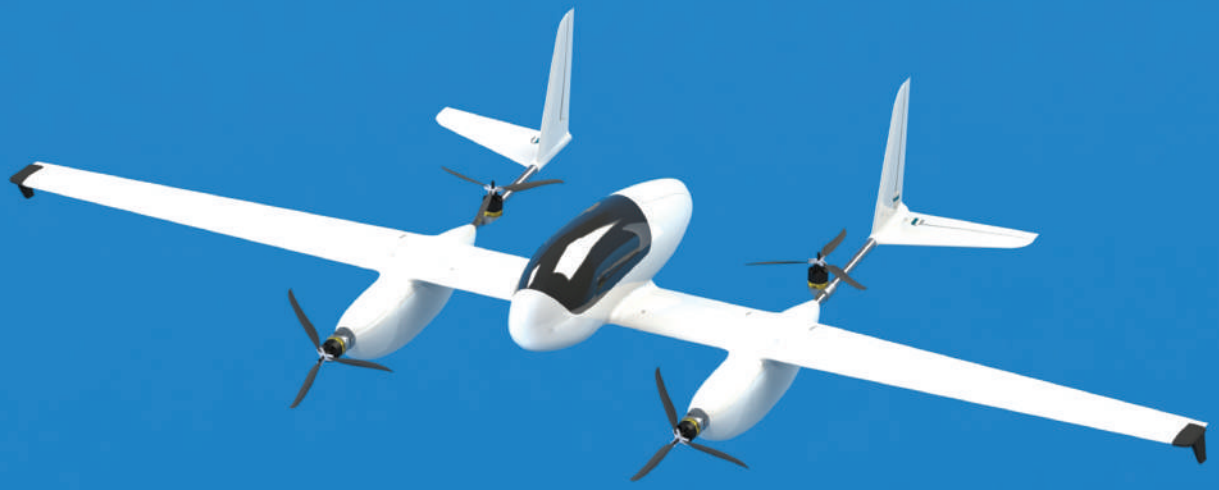
- High-precision aerial orthophoto and DTM without additional field works due to **precision GNSS L1/L2 PPK 20Hz system onboard**

- **Simultaneous RGB and multispectral camera usage** for agricultural monitoring.

Technical characteristics:

- total weight 9 kg
- up to 3 hours in flight
- up to 180 km flight distance
- parachute landing + airbag protection system
- GSD from 1 cm
- up to 20 sq.km. with 5 cm GSD (60% side overlap)
- wind tolerance up to 12 m/s

FLIRT FALCON



Specially designed for professional industrial cameras and LiDAR scanners

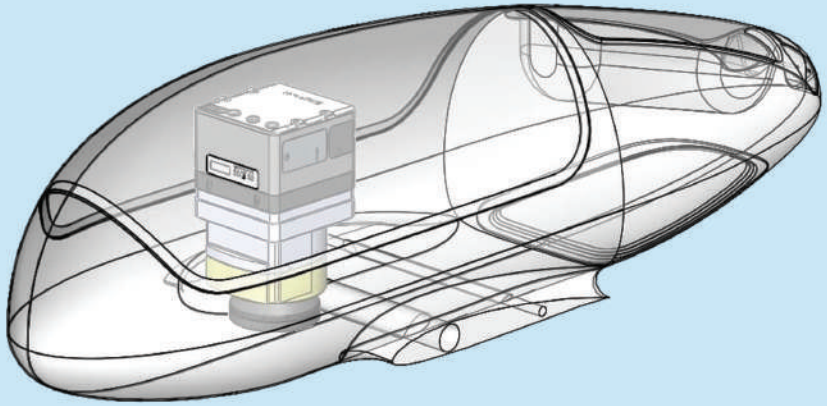
PROFESSIONAL APPLICATIONS

- LiDAR scanning
- infrastructure objects inspections
- pipelines & power lines monitoring
- aerial mapping
- natural park monitoring
- forest monitoring

Powerful solution for professional sensors

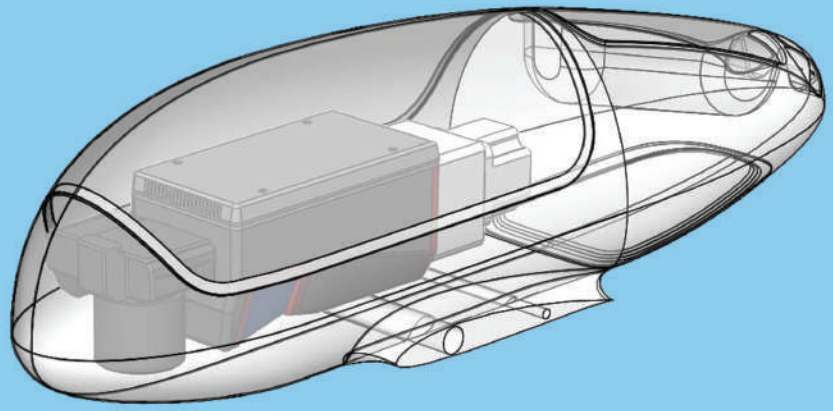
FALCON key advantages:

- Fully automatic vertical takeoff and landing **VTOL**
- Long flight time and range
- High reliable
- Automatic parashute rescue system
- Easily transported in a small case



PHASEONE

Phase One full frame ultra-high resolution aerial cameras **up to 150 MP**



Riegle VUX-120 LiDAR

Technical characteristics:

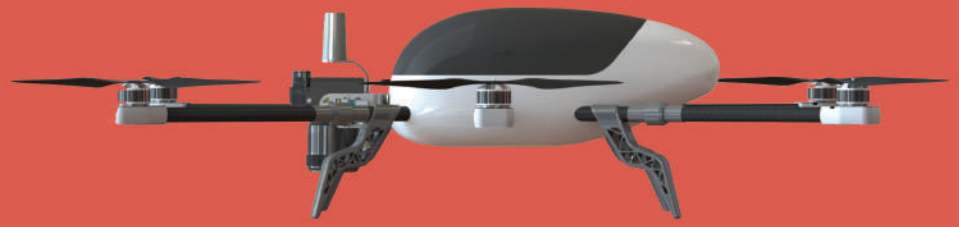
- total weight 14 kg
- up to 2.5 hour in flight
- up to 150 km flight distance
- wind tolerance up to 12 m/s
- flight speed 18...28 m/s

FLIRT BEETLE

PROFESSIONAL APPLICATIONS

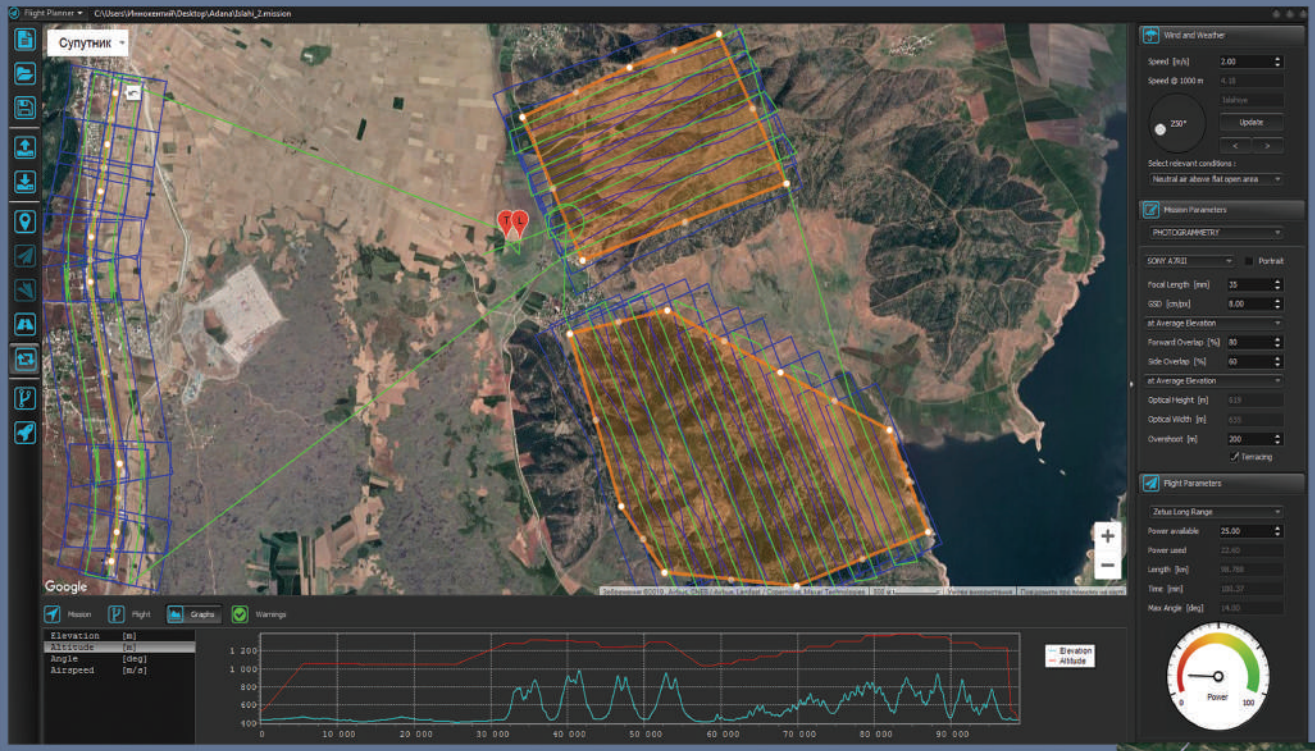
- surveillance & security
- emergencies
- aerial reconnaissance
- pipelines & power lines monitoring
- infrastructure objects inspections
- agricultural monitoring
- forest monitoring
- natural park monitoring
- aerial mapping

Lightweight, fully automatic and versatile Beetle delivers ultra-high detail and accuracy



BEETLE key advantages:

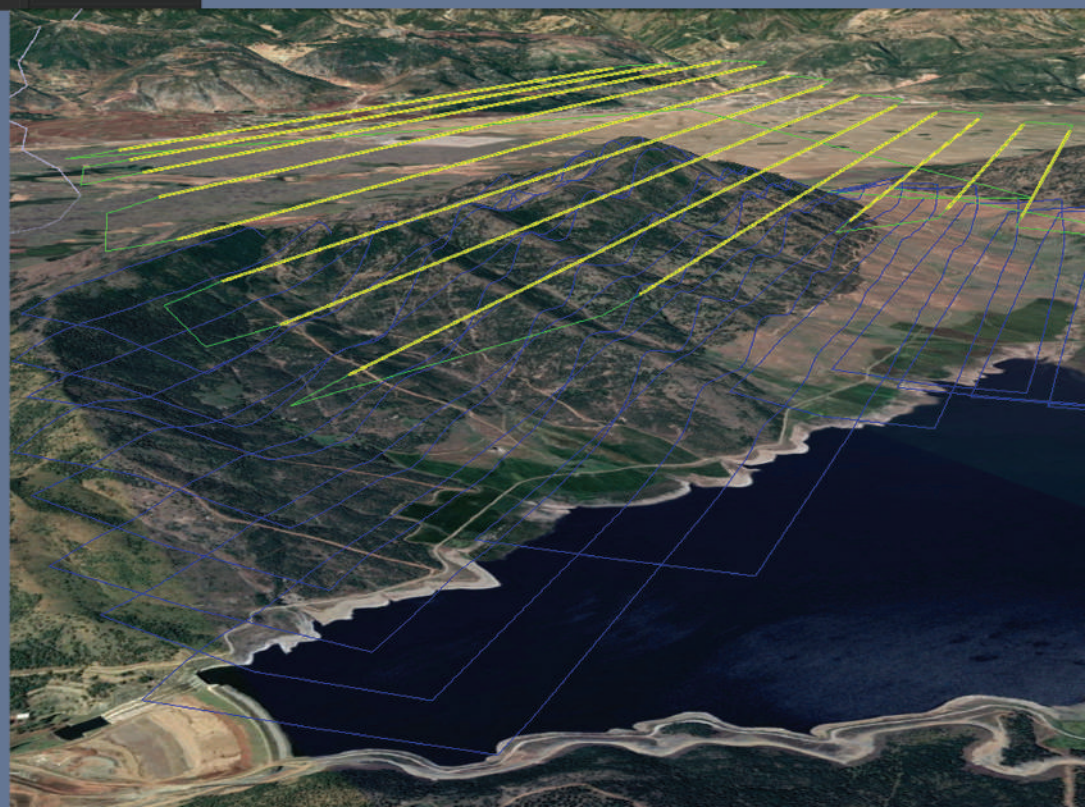
- easy changeable powerful sensors on the stabilized gimbal
- up to 61 MP full-frame camera
- interchangeable lens system
- PPK/RTK L1/l2 GNSS
- up to 40 min flight time
- up to 4 sq.km. orthophoto in one flight (7cm GSD, 80/60 side overlap)
- automatic rescue parachute system



- On-map specified takeoff and landing points, flight areas and routes
- Route, wide route and aerial mission types
- Multiple routes or areas planning in one flight
- Mission planning with smart following of the landscape
- Terassing along the mountain slope
- KML files support for import and export of mission flight data to Google Earth
- Calculation of the camera images footprints using terrain elevations and both shown in the software and exported to KML file and Google Earth

FLIGHT**PLANNER**

FlightPlanner helps you to easily create missions for fully-automated flights from take-off to landing. Smart software calculates the speed and direction of the wind in the area and the terrain specifics in real-time to calculate the flight and to plan your aerial mapping with extreme precision.
The FlightPlanner also programs and manages the on-board equipment during flight.



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