

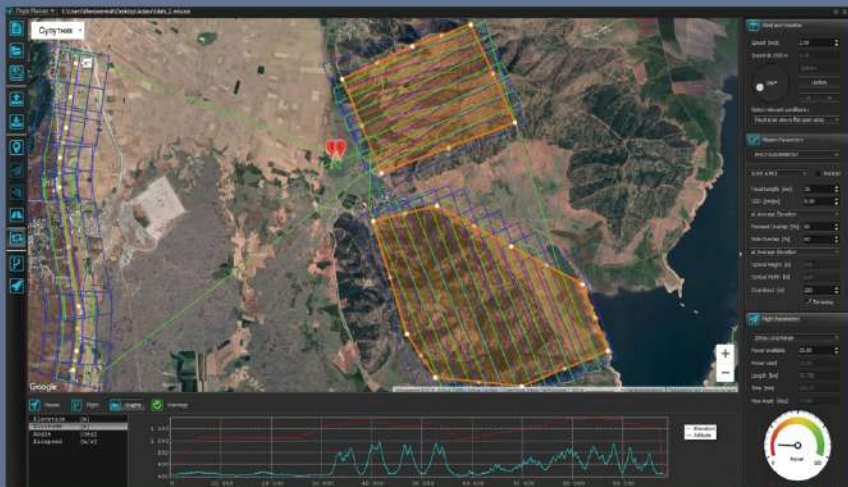


POWERFUL PROFESSIONAL UAV SOLUTIONS FOR AERIAL MAPPING AND SURVEILLANCE



efficiently operate all over the globe:
from the icy wastes of Antarctica to Turkey's highlands
and Arabian Desert

abris.aero



- 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
- Terracing 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

FLIGHTPLANNER

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.



FLIRT

FLYING INTELLIGENT ROBOTIC TOOL

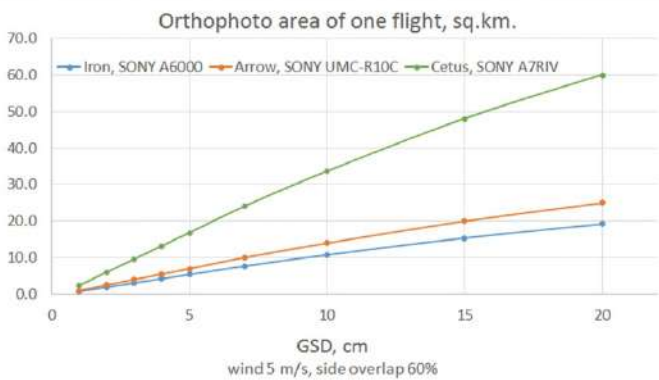
FLIRT is our model range of powerful professional fixed-wing UAVs for aerial mapping, monitoring and other remote sensing applications

PROFESSIONAL APPLICATIONS

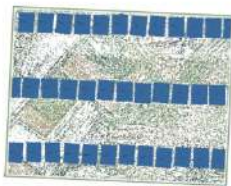
- aerial mapping 
- agricultural monitoring 
- forest monitoring 
- natural park monitoring 
- infrastructure objects inspections 
- pipelines & power lines monitoring 
- aerial reconnaissance 
- emergencies 
- surveillance & security 

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

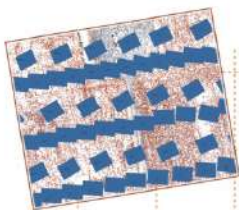
FLIRT UAV key advantages:



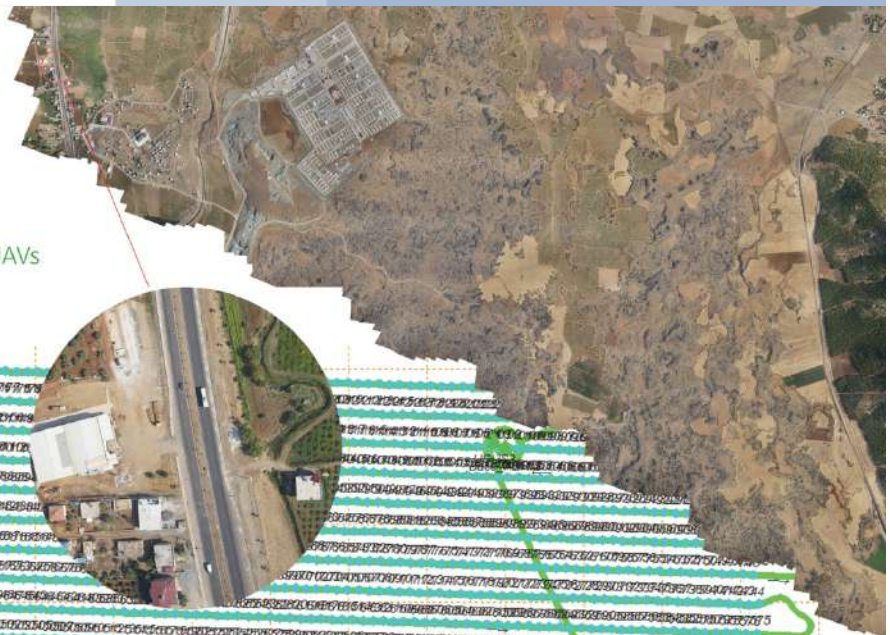
- own **smart FlightPlanner** for automatic mission creation
- **fully automatic flight** from takeoff to landing
- **point take-off** and landing
- **exceptional stability in flight** gives well oriented photos
- **wide range** of altitudes and flight speeds
- **long flight** endurance
- distance mission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

FLIR 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



FLIR DuoPro
thermal camera

SONY UMC-R10C
20 MP 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

FLIR CETUS

PROFESSIONAL APPLICATIONS



LiDAR scanning

aerial photo mapping



agricultural monitoring

forest monitoring



natural park monitoring

infrastructure objects inspections



pipelines & power lines monitoring



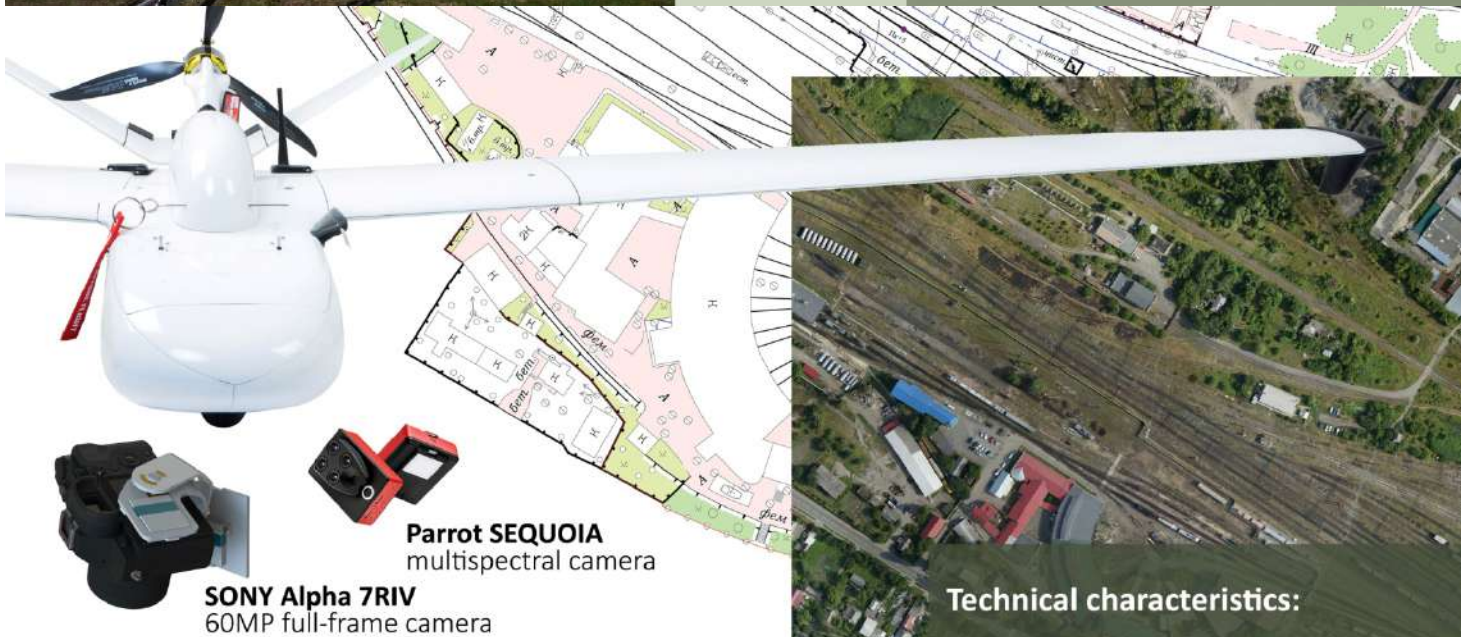
Cetus designed for high-precision aerial mapping of vast areas

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



SONY Alpha 7RIV
60MP full-frame camera

Parrot SEQUOIA
multispectral 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.

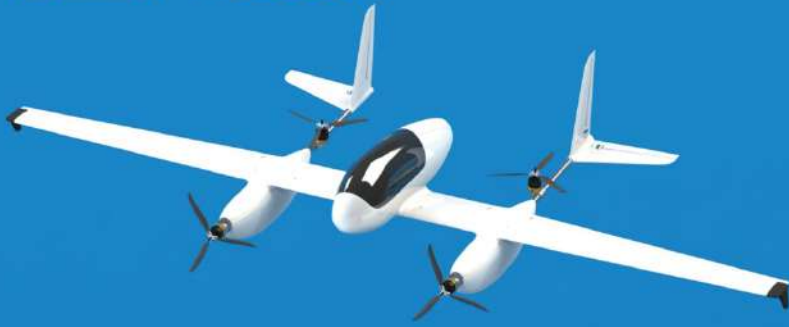
- High-precision **LiDAR-based 3D mapping** with **YellowScan Mapper+**



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

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

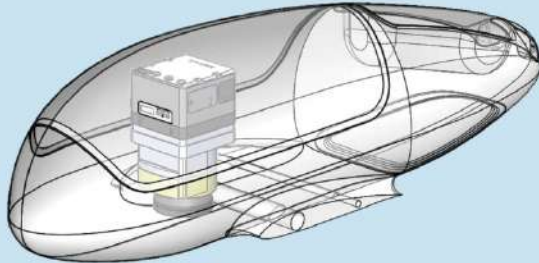
forest monitoring 

Powerful solution for professional sensors

FALCON key advantages:



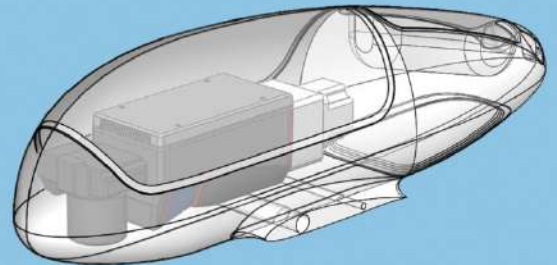
- Fully automatic vertical takeoff and landing **VTOL**
- Long flight time and range
- High reliable
- Automatic parachute rescue system
- Easily transported in a small case



PHASE ONE



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



Riegl 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

FLIR BEETLE



PROFESSIONAL APPLICATIONS

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

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

BEETLE
key advantages:



- **easy changeable powerful sensors** on the stabilized gimbal
- 60 MP full-frame camera **SONY A7RIV**
- high precision LiDAR system **YellowScan Mapper+**
- PPK/RTK **L1/L2 GNSS**
- **up to 60 min** flight time
- **up to 4 sq.km.** orthophoto in one flight (5 cm GSD, 80/60 side overlap)
- automatic rescue **parachute system**



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