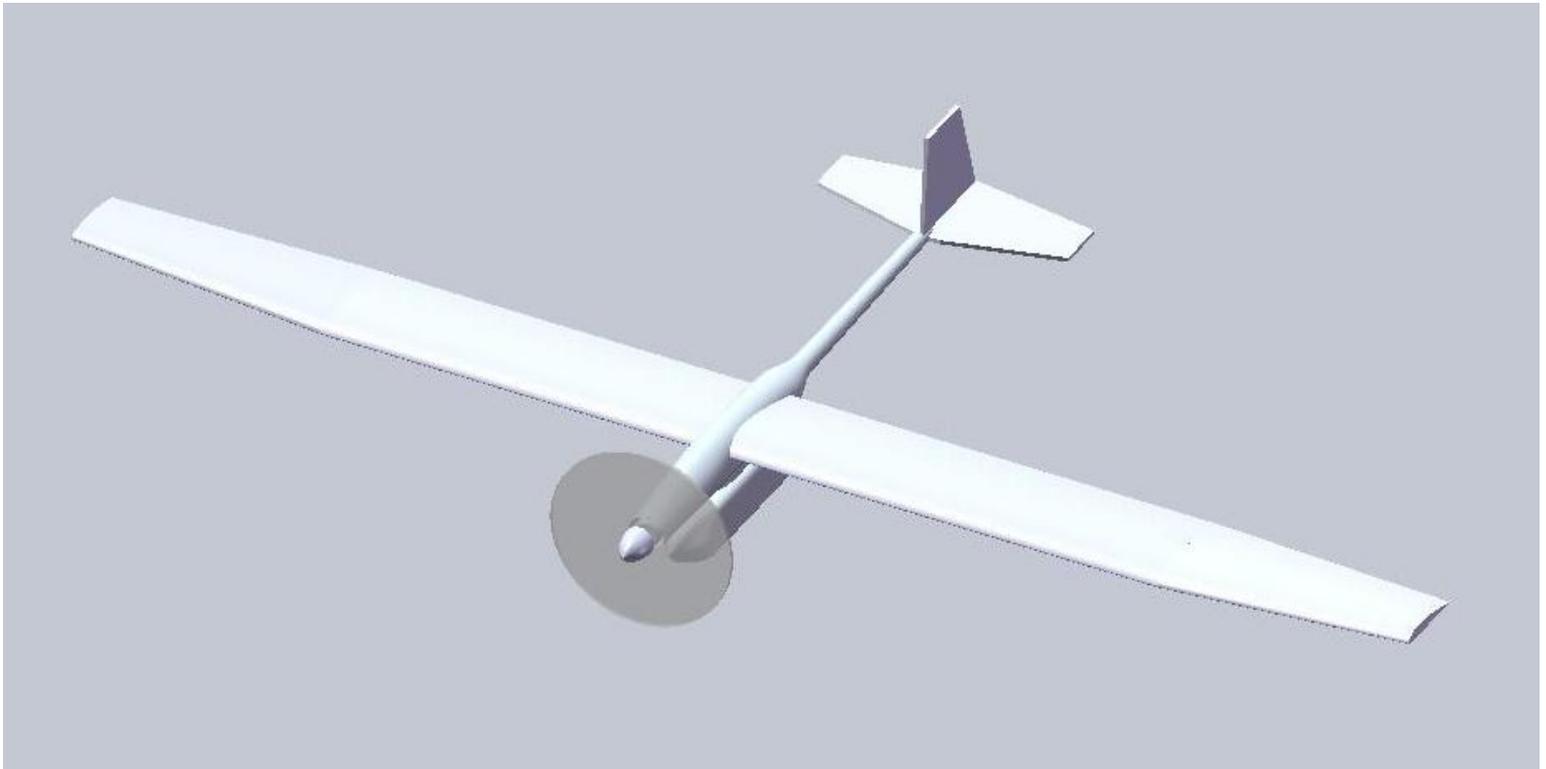


ZONDA IE
UAV IMAGERY INTELLIGENCE (IMINT) GATHERING UAV –MEDIUM RANGE –
LOW ACOUSTIC SIGNATURE

SUMMARY



General Characteristics

The UAV ZONDA IIE (Extended Imagery Intelligence) Nostromo Defensa's latest Class I UAV design.

This new UAV has been developed in order to cover the demanding requirements of IMINT with both real time and on board recording of high quality still images in visible and NIR and IR bands .

The system has been designed to operate in heavy weather conditions with minimum crew (2) . The ZONDA IIE has a very low acoustic signature , making its operation at typical operating altitudes virtually stealthy .

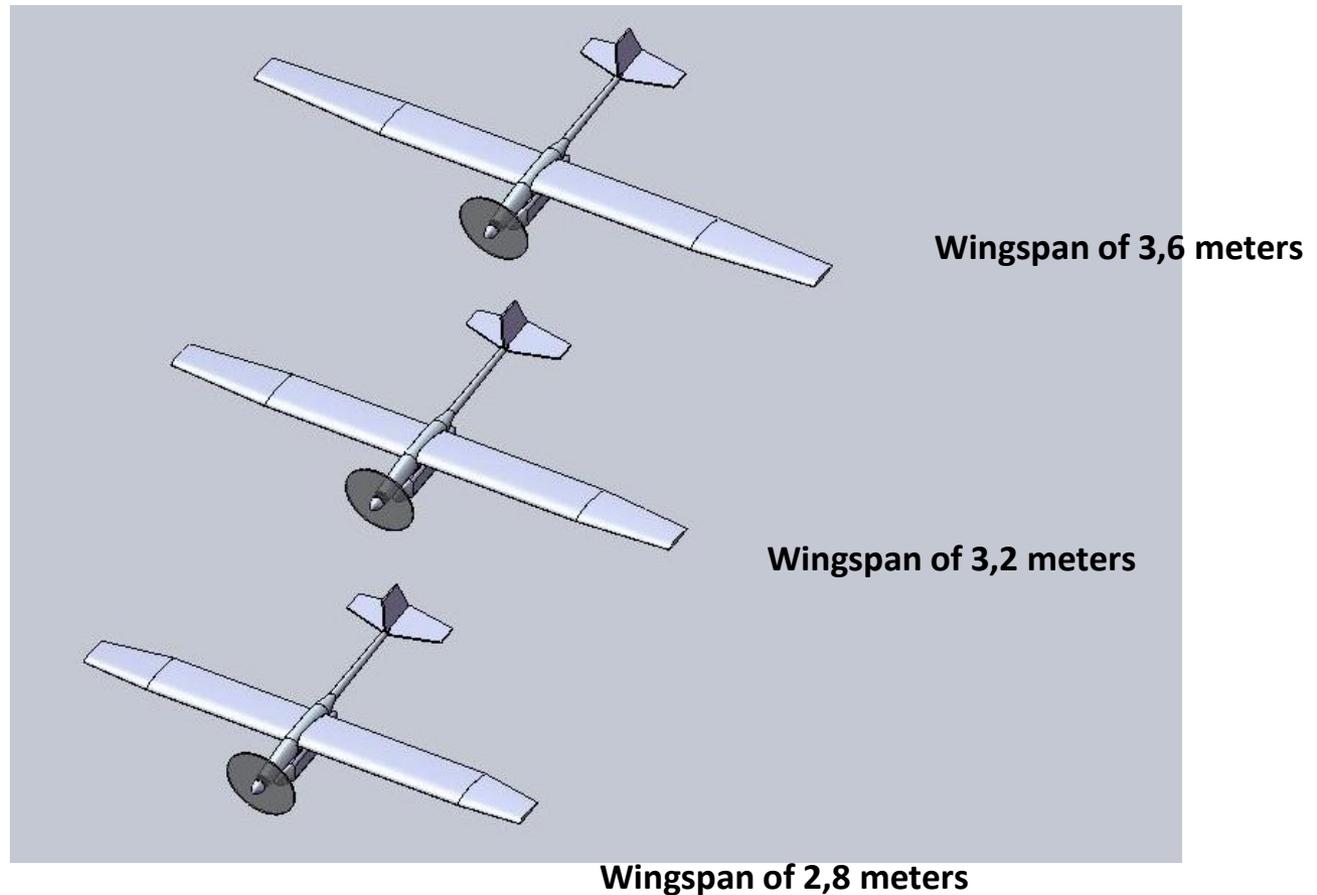
The ZONDA IIE can be operated in several flight modes including fully automatic , assisted or even manual modes . The avionics system is the latest generation of UAV flight computer/autopilot systems and can be fit with two autopilots and a mission computer for redundancy . The INS/GPS can also be fitted to the imagery payload as strap-down inertial platform in order to improve the geodata for the sensor suite .

The ZONDA IIE UAV can be launched by catapult , or using a trolley for conventional take off and recovery is done by parachute or belly landing (conventional) .

With a maximum wingspan of 3.6 meters and a MTOW of 15 Kg., the ZONDA IIE UAV can carry up to 3 kg. payload with an endurance of more than two hours up to 30 km range. The payload system is easily interchangeable , using either video cameras or still photographic cameras according to user requirements .

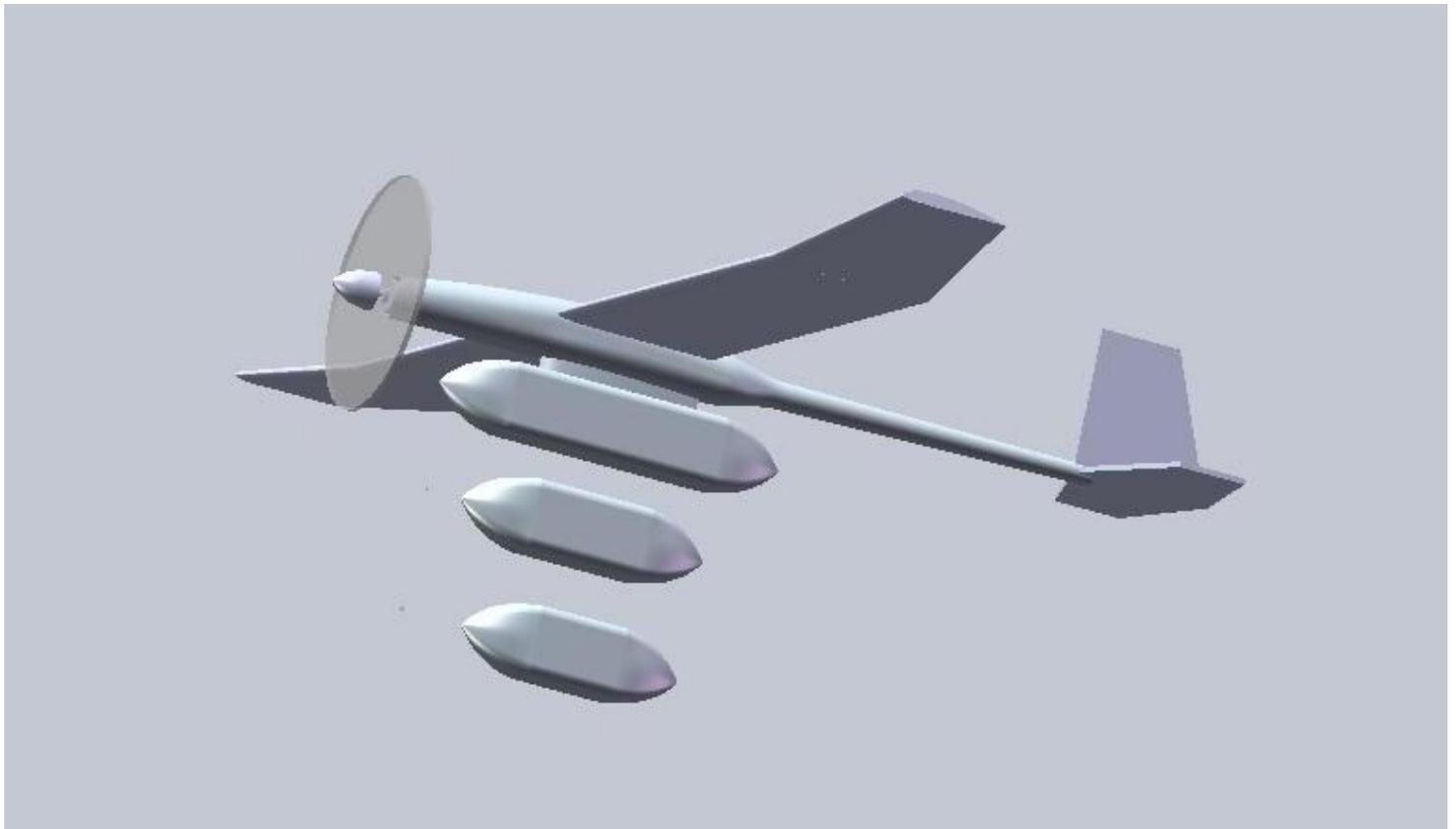
Innovation

The ZONDA IIE UAV has a central wing and three sets of removable wing tips , in order to adapt the wing area and hence the wing loading to an optimize the plan according to the payload weight and weather conditions



Innovation

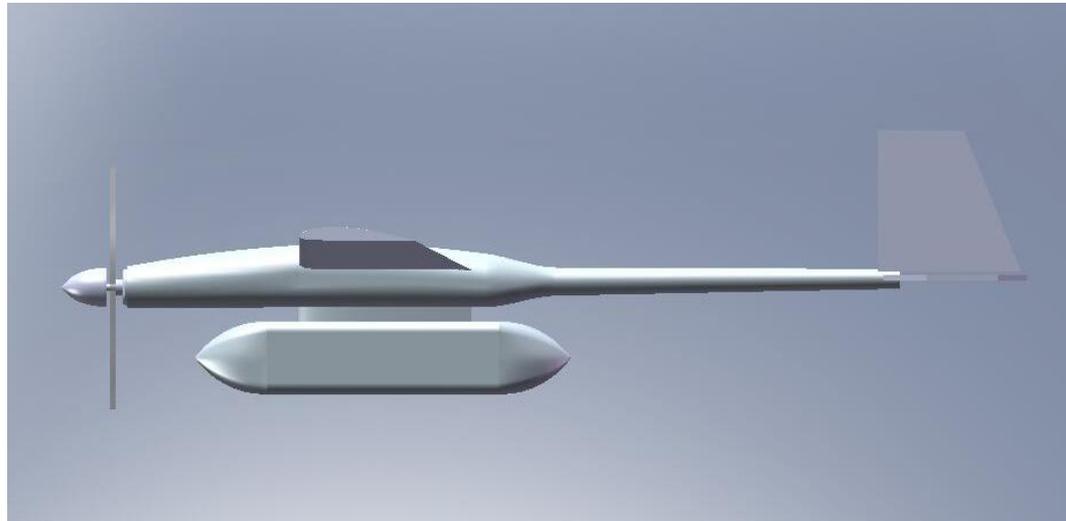
The ZONDA IIE is fitted with a removable container that carries the batteries and the payload . It is possible to combine the proper payload and energy on board based on specific mission profiles. The UAV can be reconfigured quickly from mission to mission.



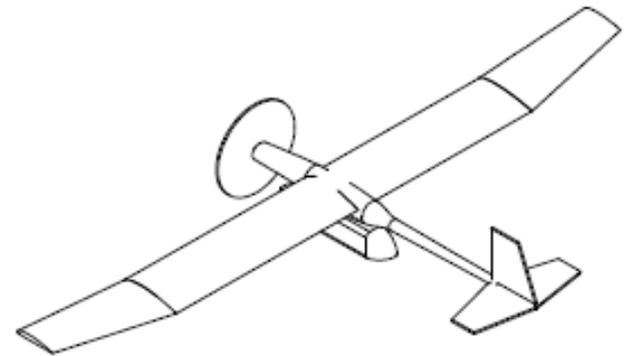
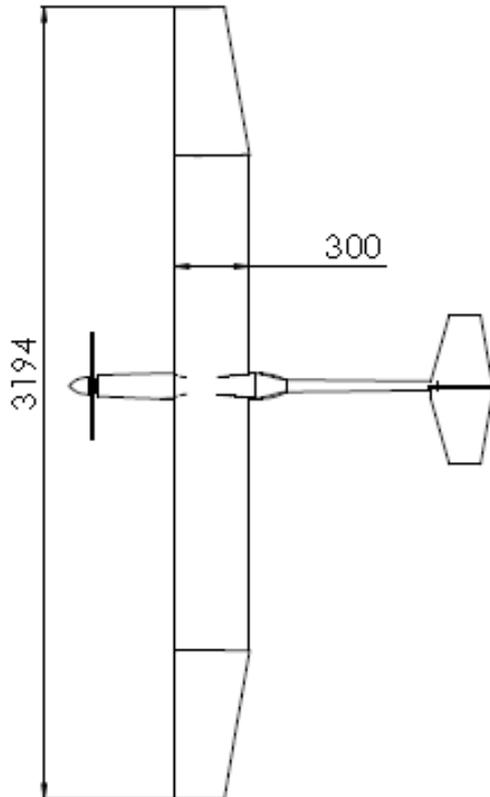
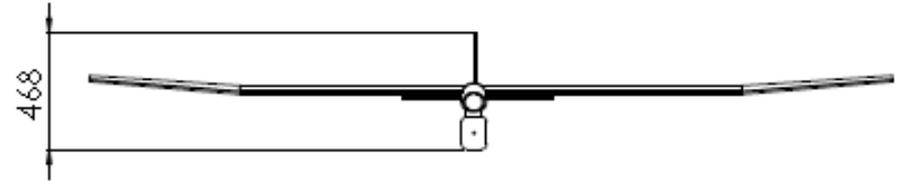
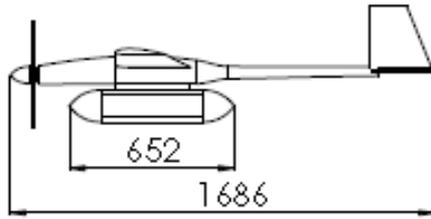
SYSTEM DESCRIPTION

The ZONDA IIE system is composed of :

- ZONDA UAV
- Portable Ground Control Station
- Catapult
- Battery Charger
- Support equipment



Dimensions



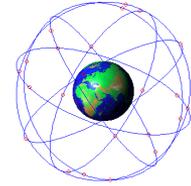
Payload Still Photo Imagery

Images
transmitted to
GCS

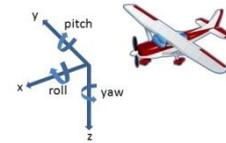


Image Processor

GPS



IMU



CCD RGB Camera
Resolution: 2 MPx to 16 MPx



IR Camera
Spectral Range: 7,5 to 13,5 μm



Multispectral Camera
Resolution: 3,2 MPx

Examples of cameras (others can be integrated on demand)