

CybAero - APID 60 VTOL UAV System

The CybAero APID 60 is a recognized Vertical Take-off and Landing Unmanned Air System (VTOL UAS), which provide a unique multi-purpose airborne capability.

The CybAero team has worked intense to offer a system that is safe, highly mobile and affordable to operate, yet delivers quick and accurate information for extended situational awareness both at land and in maritime environments.

The unmanned helicopter air vehicle has on-board systems for stabilization and navigation allowing it to carry out autonomous missions managed from the Ground Control Station.

The APID 60 system consists of the following key components:

- APID 60 Unmanned Air Vehicle
- Network enabled, compact Ground Control Station (GCS)
- Payload System (EO-IR sensor or user specific)

The APID 60 provides due to its robust frame design, a highly flexible payload installation and can accommodate a wide range of payload systems such as:

- Stabilized cameras with day & night capability (EO/IR)
- Hyper/Multi-spectral cameras
- Synthetic Aperture Radar (SAR)
- Signal Intelligence (SIGINT)
- Communications Intelligence (COMINT)
- Radiation detector
- Transponder
- Communications relay
- Media/device drop
- Loudspeaker

The APID 60 UAS offers a State-of-the-art network-centric ground control station for rapid intelligence distribution.

All flights are planned and controlled from the Ground Control Station by a simple point-and-click Graphical user interface. The APID 60 can also be operated in a semi-manual mode with a joystick if desired. In all operating modes the Flight Control System provides automatic attitude stabilization and keeps the vehicle within safe operating limits.

Encrypted digital Data-link providing real-time information up to 200km distance between the air vehicle and the Ground Control Station are offered.



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CybAero has strived to offer a highly efficient, reliable and safe system configuration that can be operated by as little as two people. Training courses for both operating and maintaining the systems are offered.

Applications

The great range of payload systems offered, combined with a relatively long endurance and small system footprint makes the APID 60 UAS highly suitable for a large number of challenging missions:

- Hostile area surveillance
- Anti-terrorism/Anti-Piracy operations
- Border and Coast surveillance/Ship monitoring (AIS)
- Ground troop escort
- Electronic warfare
- Target Acquisition/Mapping
- Mine detection
- Communications relay
- Search missions

Customers

The APID 60 UAS has been delivered and deployed for both military and civilian applications.

Maritime options

The APID 60 VTOL UAS equipped with a true automatic ship deck landing based on the principles of Global Navigation Satellite System, offers a unique system option. An option that automatically controls the approach, automatic landing and lock-down on the ship's deck. APID 60 can also be delivered with a Diesel engine for use with JP-5/JP-8 type kerosene based fuel.

Specifications APID 60 VTOL UAS

FUSELAGE

Structural material: Carbon fiber, Titanium, Aluminum

Length: 3.20 m (126")
 Height: 1.20 m (47")
 Width: 0.95 m (37")
 Rotor diameter: 3.30 m (130")

Empty weight: 105 kg (231 lbs.)
 MTO weight: 180 kg (400 lbs.)
 Payload & fuel: 75 kg (165 lbs.)

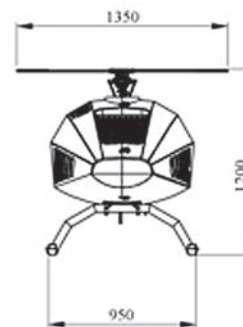
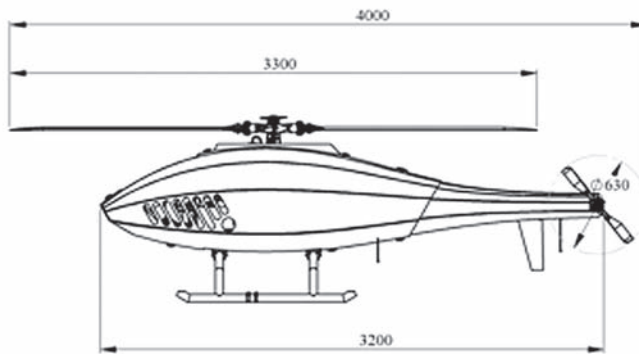
POWER PLANT

Power rating: 41 KW (55hp)
 Type: 2 cylinder, 2 stroke, water-cooled, Fuel injection

Fuel type: Gasoline & Diesel (JP5/JP8)
 Fuel consumption: 10L/hr. (at cruise)
 Fuel capacity: 70 Liter (18.5 gal)

PERFORMANCE

Dash speed: 150 km/h
 Cruise speed: 90 km/h
 Endurance: 6-8 hrs.



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