

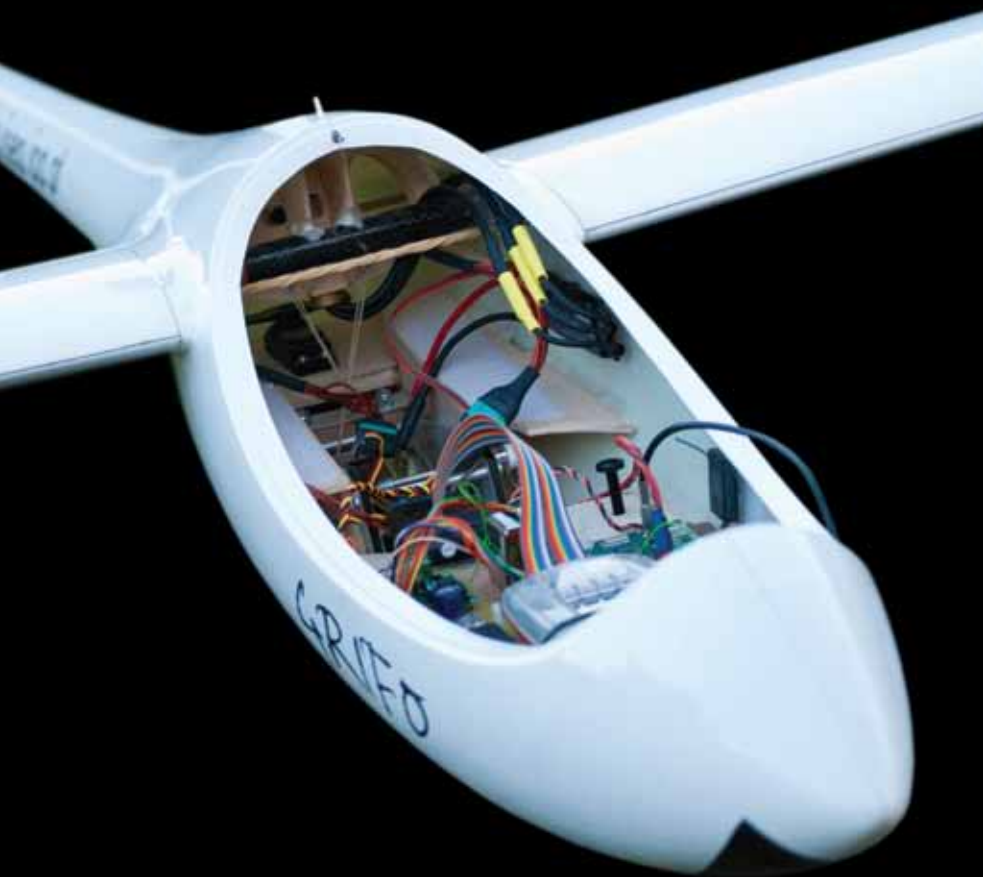


GRIFO

AUTONOMOUS
AERIAL
VEHICLE



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GRIFO

AUTONOMOUS AERIAL VEHICLE

GRIFO is a small scale, fixed wing autonomous flight vehicle (unmanned aircraft) designed for environmental monitoring, security, forest fire prevention, communications relay and search and rescue missions. Developed by a team with more than 10 years of experience in aerial robots, this vehicle with on-board image processing and autonomous flight control can operate without direct communication with the land station. A custom developed inertial navigation system and autopilot allows the tight integration of additional sensors, a high degree of navigation positioning and sensor in the loop custom manoeuvres for particular applications. Advanced on-board image processing is used not only in application tasks (event detection, target tracking etc.) but also in automatic visual detection of obstacles (land and in flight) in order to endow the UAV with the capability of operating in accordance with VFR (Visual Flight Rules) aerial regulations.

MAIN FEATURES

- Electric propulsion
- Custom developed autopilot
- Custom developed small scale inertial navigation system
- Low consumption on-board ARM (Cortex A8) CPU
- WiFi communication
- Autonomous flight control in gliding mode
- On-board imaging processing
- Image based sense and avoid
- LiPo batteries (Lithium-ion polymer)

SPECIFICATIONS

- Wingspan: 4 m
- Maximum take-off weight: 10 kg
- Cruising speed: 50 km/h
- Autonomy: 4 to 6 hours
- Fibreglass glider airframe



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