

GIRONA 500 AUV



Universitat de Girona

GIRONA 500

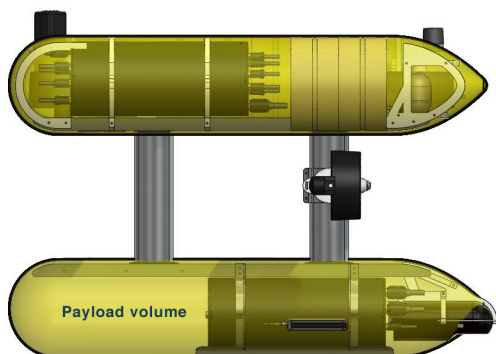
AUV

Features

The Girona 500 is a compact and lightweight autonomous underwater vehicle with hovering capabilities, which can fulfill the particular needs of any application by means of mission-specific payloads and a reconfigurable propulsion system.

Vehicle specifications

Height:	1 m
Width:	1 m
Length:	1.50 m
Hull diameter:	0.3m
Weight in air:	from 140 kg
Maximum depth:	500 m
Energy:	2.2 kWh Li-Ion battery cluster
Endurance:	> 8hrs (Dependent on speed, payload and propulsion system configuration)
Propulsion system configurations:	from 3 thruster (3DoF) to 8 thruster (fully actuated).
Tracking:	emergency transponder.



Standard Sensors

- Doppler velocity log
- Attitude and heading reference system
- Fiber optic gyro (heading)
- GPS
- Ultra short base-line
- Dual frequency profiling sonar
- Sound velocity sensor
- Pressure gauge
- Sidescan sonar
- Video Camera system + LED lighting

Payload

- 35 liters volume available for mission specific equipment.
- Ethernet and RS - 232 interfaces with the vehicle
- Regulated 24V@10W

Communications

- WiFi
- Acoustic modem
- Tether (optional ROV mode)

Navigation

- GPS position on surface
- Inertial (DVL / FOG-AHRS)
- Absolute positioning (USBL / GPS / AHRS)