

# AUTO ECO-MARINE

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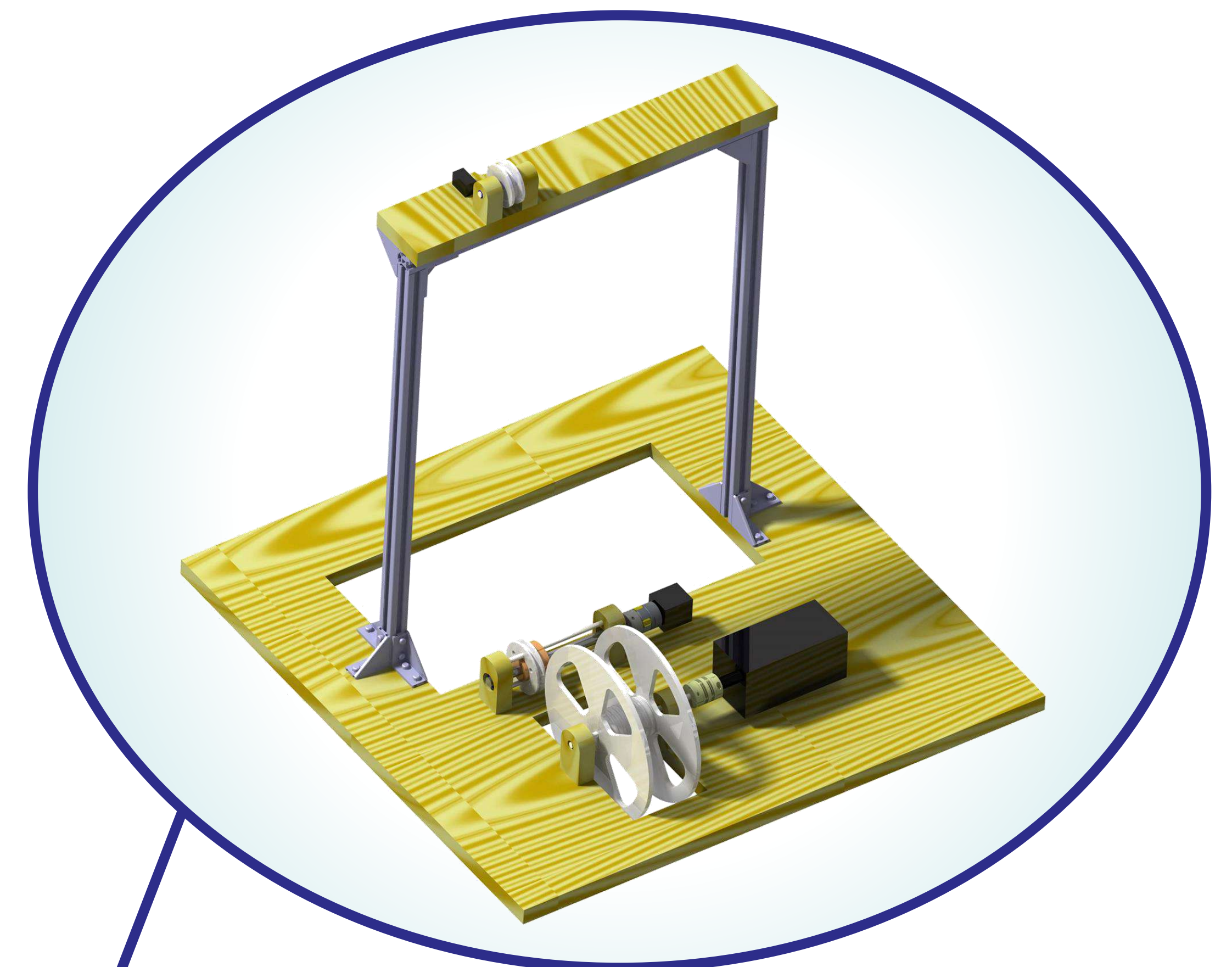
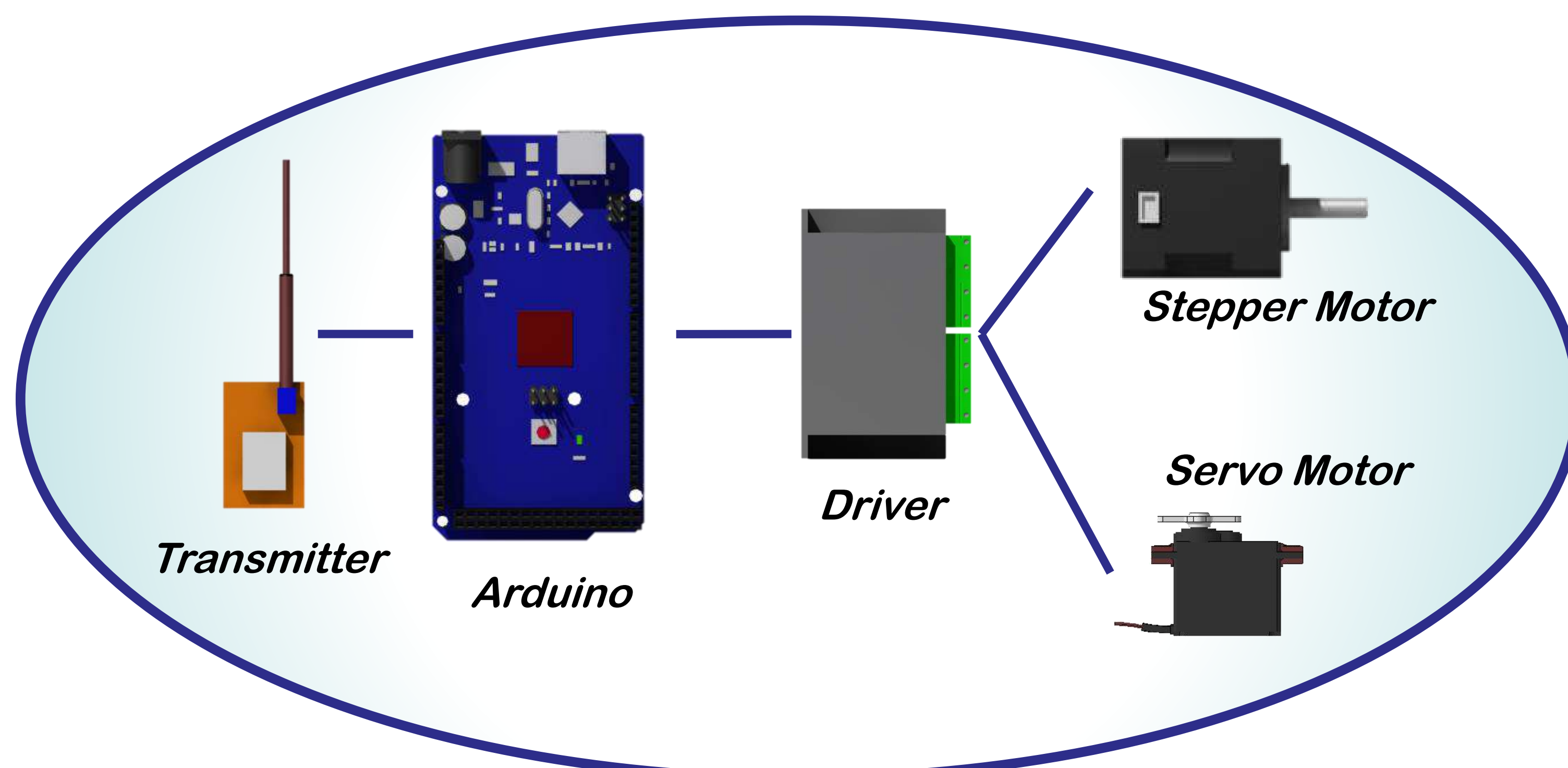
## Introduction:

*By leveraging machine intelligence, autonomous surface vessels have been used to perform various functions. Project Auto Eco-Marine is the design and manufacture of an autonomous surface vessel for freshwater ecological survey. This vessel will be able to obtain and carry samples of water from different water sources, different depths and different location while performing independent navigation. At this stage of the project, our team have successfully built a radio-controlled vessel with the bespoke functions.*

## Specifications:

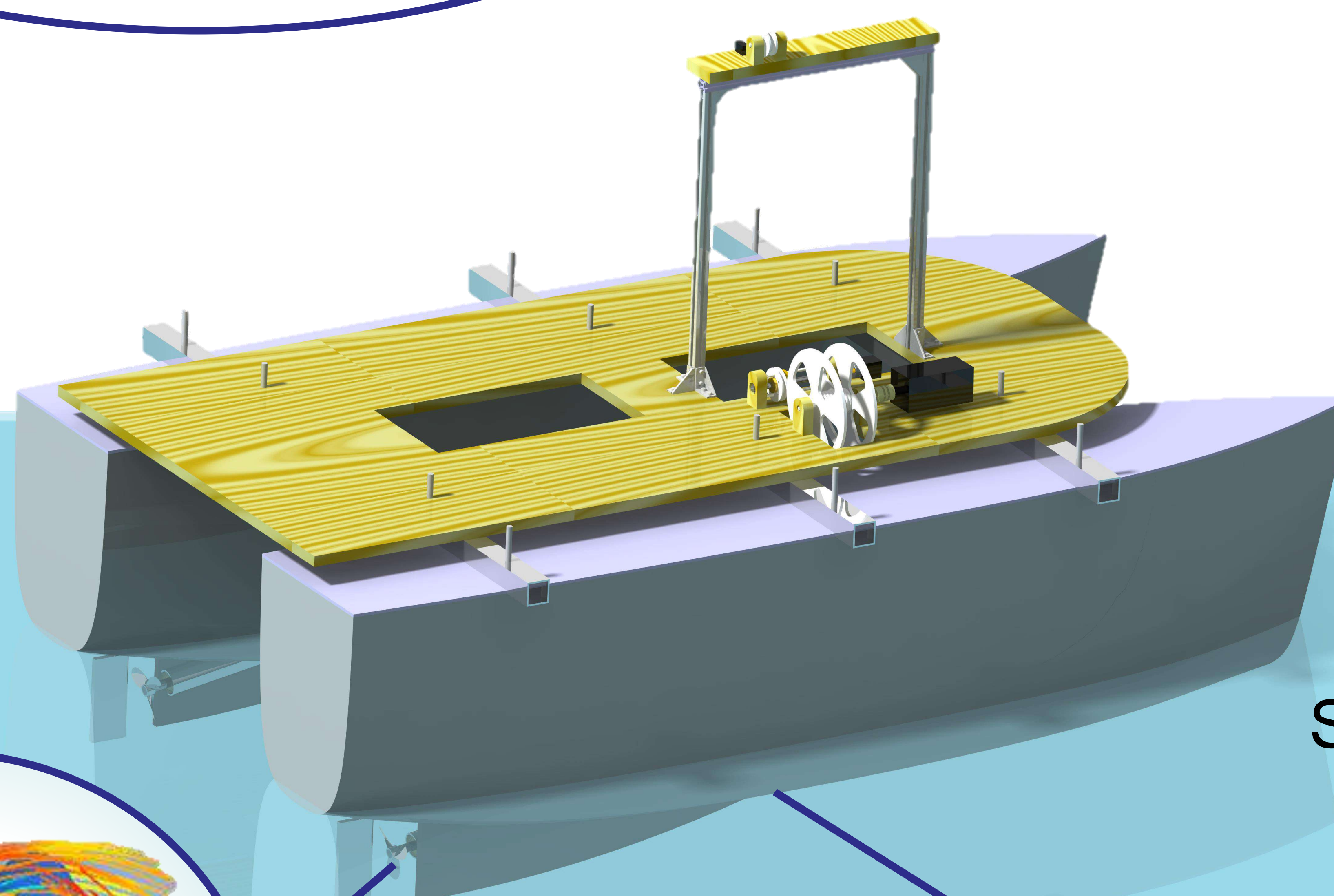
- **Size:** 2m length, 1.2m overall beam
- **Weight:** 80.6kg
- **Endurance:** 4 hours
- **Operating speed:** 3 knots
- **Control range:** 300m
- **Sampling depth:** 10m

## Control System:



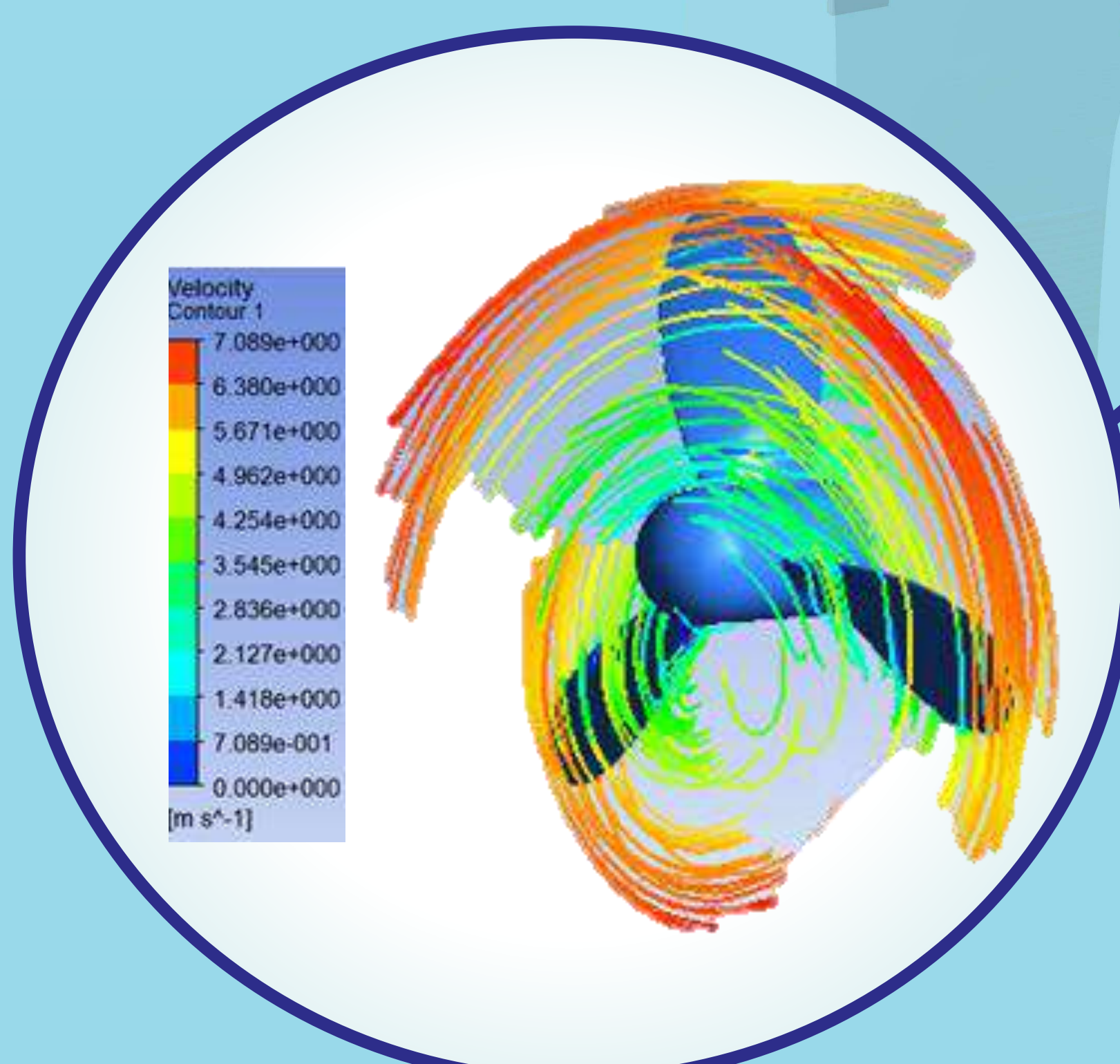
## User-friendly Water Sampling

- *Efficient fleet angle compensator provides reliable spooling at adjustable depths*
- *Touchscreen operated transmission and control*



## Superior Hull Design

- *Round bilge provides better surface stiffness*
- *Keel rocker provides better manoeuvring capabilities*



## Optimized Propulsion

- *3-bladed propeller designed and manufactured to 60.5% efficiency*
- *Geometries computationally generated and tested*

