Micro Underwater Robot

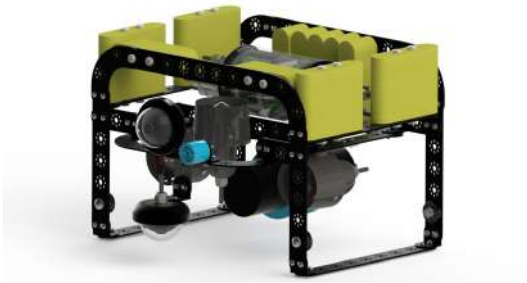
DESCRIPTION

MUR kit is designed to build various types of underwater robots which can be used for demonstrational and educational purposes.

Micro Underwater Robot can move in water media using its thrusters and perform video capturing just like the devices used in oceanography and offshore development.

Integrated development environment (MUR IDE) simplifies programming of on-board computation module to perform various underwater missions.

MUR features position sensors and cameras which enable implementation of computer vision and navigation algorithms similar to ones used at real world applications.



COMPLETE EQUIPMENT

- Autopilot based on Intel Edison
- 3 thrusters
- 2 cameras
- Battery
- Depth sensor
- 9 axis IMU sensor
- Buoyancy
- Frame elements
- Fasteners
- MUR IDE

TECHNICAL SPECIFICATION

SYSTEM

Dry weight	5,5 kg
Max. Depth	5 m
Onboard computer	Intel Edison
Communication	Wi-Fi
Programming language	C++

PERFORMANCE

Thrust (each thruster)	forward 0,14 kg reverse 0,13 kg
Autonomy	1 hour at max load 2 hour at standard load
Image resolution	up to 1288 x 728 px
Computer vision	up to 15 FPS

ONBOARD CONFIG LIMITATIONS

Thrusters	4
Cameras	2
Additional sensors	2

SENSOR ACCURACY

Depth	2 cm
Heading	3°
Pitch / Roll	1°

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