



SEASAM

Your autonomous underwater drone

Vehicle

Size: 55cm x 45cm x 23cm / 22in x 18in x 9in

Weight in air: 9 kg / 20 lbs

Handling: 1 person for launch / recovery, no ROV pilot needed

Max Speed: 1.5 m/s (3 knots)

Battery life: 1.5 hours, interchangeable batteries

Maximum depth: 100 m / 330 ft

Bumper Frame Material: PEHD

Hardware architecture: modular platform allowing tailor-made design for each use (vector performance, carrying of other sensors...)

Camera

Sensor: 1/2,5 inch CMOS AR0521

Video Streaming Resolutions: 5MP (still image) , Full HD 1080p (60 fps)

Responsivity: 18.8 ke-/luxsec

DFOV: 5MP – 139°

Interface

Underwater control (follow the diver): selection of navigation scenario, filming mode, recording start/stop, lights on/off, **Emergency surfacing**

Supported Operating Systems Android Tablet, Linux (Notilo Plus API)

Communication Interface WiFi, Ethernet

Communication Protocol UDP

Control Input Android Tablet, Bluetooth Joystick

Sensors

Depth Sensor (Meters or Feet), Internal **Temperature**,

Tether Counter (Meters or Feet), **GPS**, 9-Axis IMU,

Magnetic Power Switch

Standard Battery

Capacity 6600 mWh

Voltage 14,6V

Chemistry: NMC

Recharge Time 2.5 hours

Battery life: 1.5 hours, interchangeable

Battery Weight: 800g

XL Battery

Capacity 10400 mWh

Voltage 14,6V

Chemistry: NMC

Recharge Time 4 hours

Battery life: 2.5 hours, interchangeable

Battery Weight: 1050g

Thrusters

Max Thrust Force: 5,1 kgf

Max Reverse Thrust: 4,1 kgf

Min Thrust Force: 0,01 kgf

RPM 300-3800 Rev/min

Max Power 350 Watts

Voltage 6-20 V

Max Current 25 A

Weight in Water 156 g

Tether

Diameter 6mm

Length: 100 m

Max Working Strength 200N

Buoyancy: neutral in Fresh Water

Conductors: 2xTwisted Pair

Standard Light set-up

Illumination 2*1000Lm

Beam Angle : 110°

Energy: drone-powered

Orientation: Facing drone

Turbidity Light set-up (option)

Illumination 2*8000Lm

Beam Angle : 110°

Energy: battery-powered

Orientation: deported from camera

Navigation

Navigation: autonomous navigation, back to base, emergency surfacing and obstacle avoidance modules

Engines: 7 (6 degrees of freedom)

Options

Modularity of the platform allows to add options

Maximum depth, Battery life, Speed can be increased. Camera types, position, front light can be enhanced. Sensors can be added.