



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...)
Storage temperature : -20°C/+60°C
Air temperature in operation : -5°C/+50°C
Water temperature in operation : 2°C/+35°C

Camera

Sensor: 1/2.8" CMOS Sony IMX290 sensor
Video Resolution: 2 MP FULL HD 1920(H) x 1080(V)
Minimum Illumination: 0.002 Lux
WDR: 63db

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**

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.

Standard Battery

Capacity 6600 mAh
Voltage 14,6V
Chemistry: NMC
Recharge Time 2.5 hours
Battery life: 1.5 hours, interchangeable (400 charging cycles)
Battery Weight: 800g

L Battery

Capacity 10400 mAh
Voltage 14,6V
Chemistry: NMC
Recharge Time 4 hours
Battery life: 2.5 hours, interchangeable (400 charging cycles)
Battery Weight: 1050g

XL Battery

Capacity 28 800 mAh
Voltage 14,6V
Chemistry: NMC
Recharge Time 6 hours
Battery life: 4 hours, interchangeable (600 charging cycles)
Battery Weight: 1780g

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 4mm
Length : 100 m
Max Working Strength 100N
Buoyancy: neutral in Fresh Water
Conductors: 1xTwisted 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)