SEASTICK
SERIES

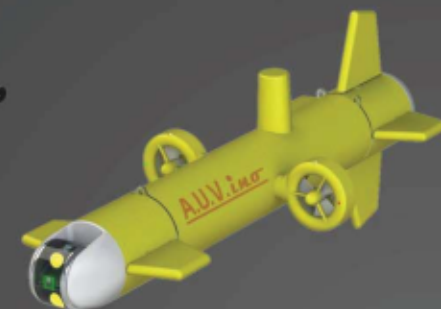**Apel mar** Technology S.r.l.

Seastick 1000
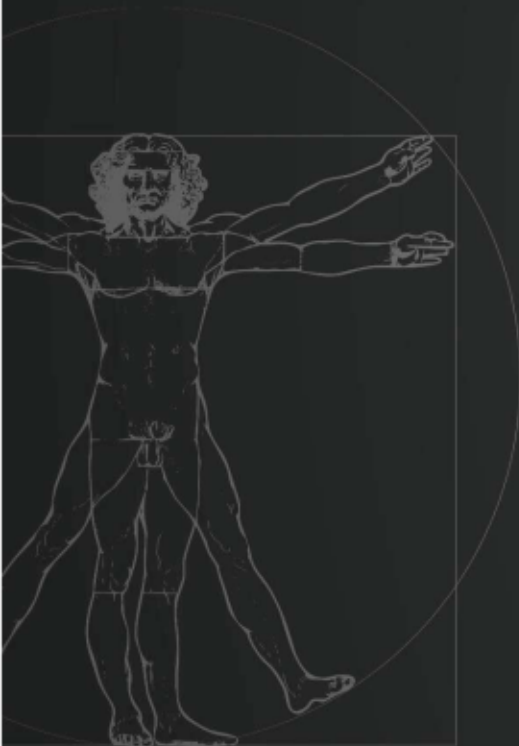
Seastick 300

A.U.V.ino

SEA the FUTURE
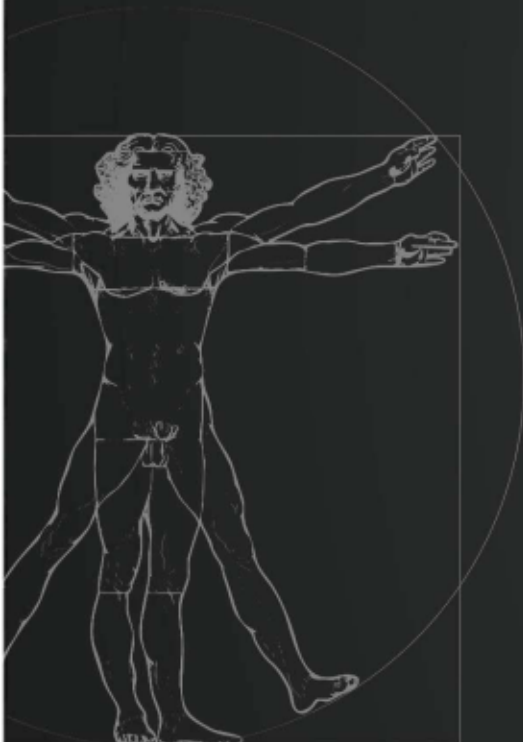
INDEX

A.U.V.ino

Apel mar Technology S.r.l.

A.U.V.ino
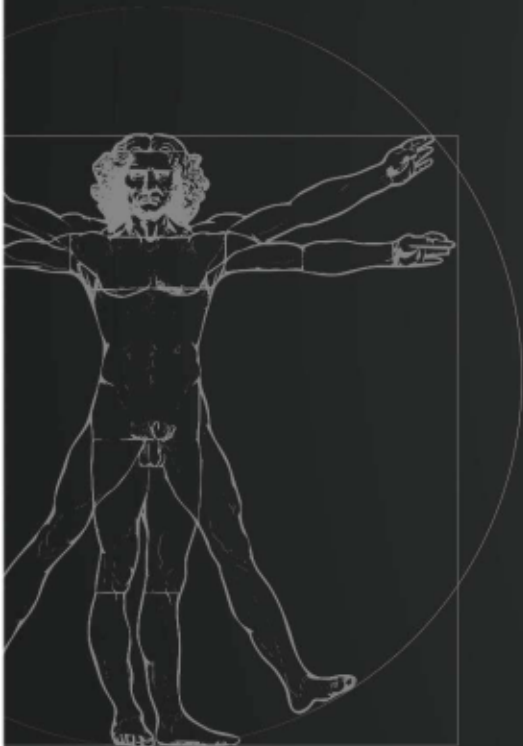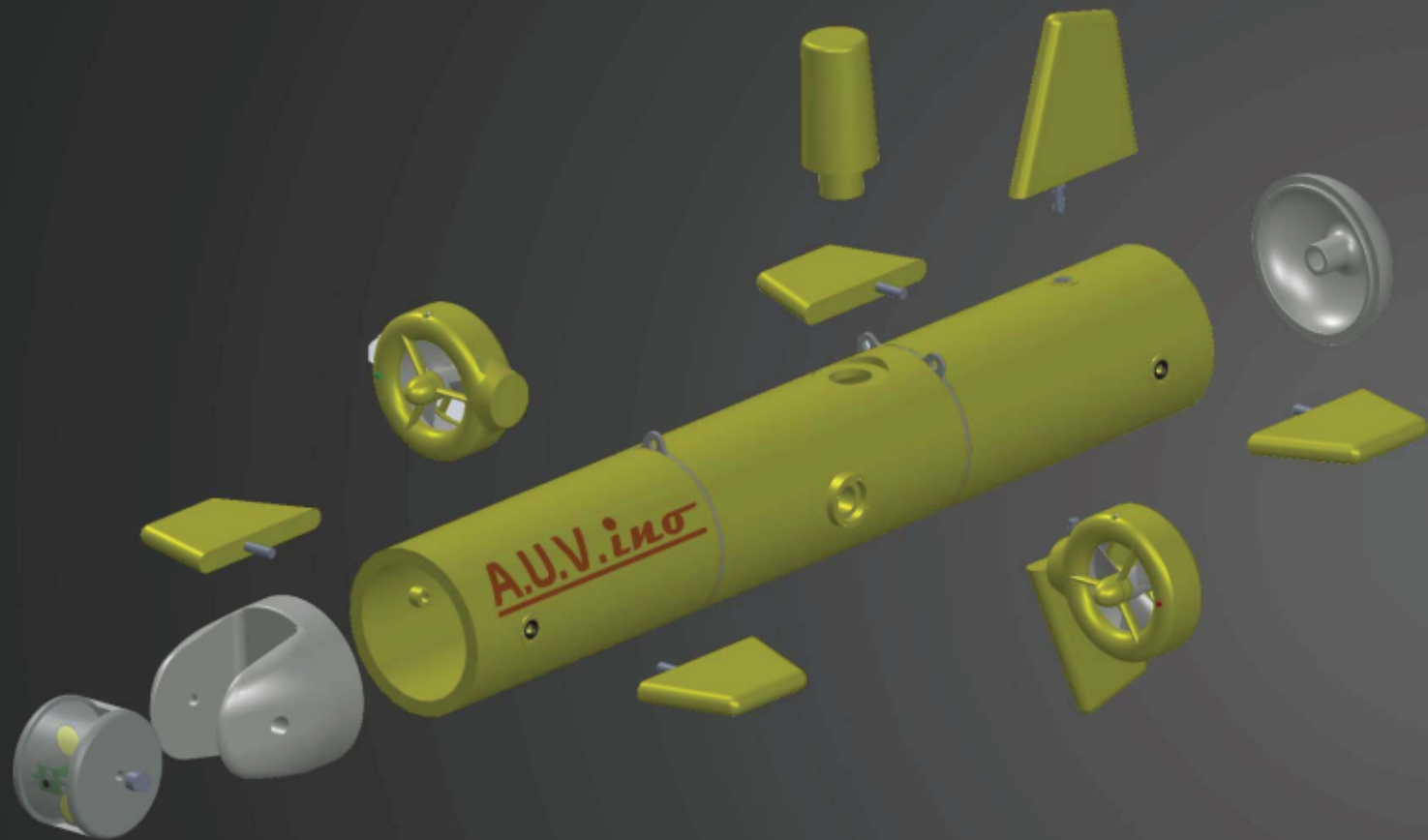
One - man operation
Simplified deployment / retrieval
High - res frontal camera
User - programmable and expandable

Hull lenght: 1200 mm (47 in) / Hull diameter: 160 mm (6,3 in)
Weight in air: 24 kg (52,9 lbs)
Buoyancy: + 0,5 kg (+ 1,1 lbs)
Maximum operating depth: 100 m (330 ft)
Battery and autonomy: 6 hours
Velocity range: 1,03 m/s (2 knots)

SEASTICK 300

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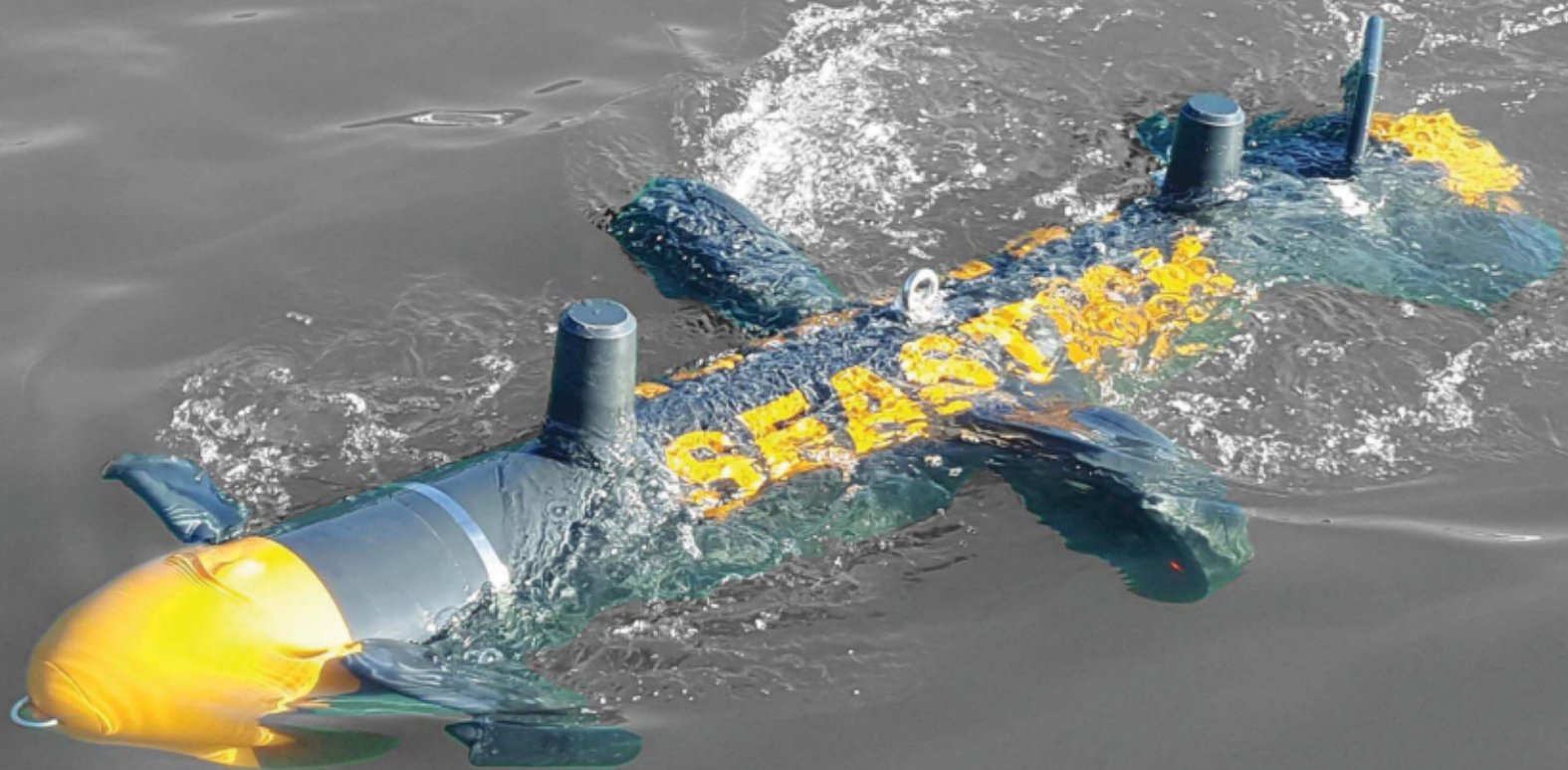
Hovering and vertical manouvering
Automatic roll and pitch stabilization
Low magnetic signature
Customizable payload
Minimal maintenance
Autonomous operation at 300 m depth
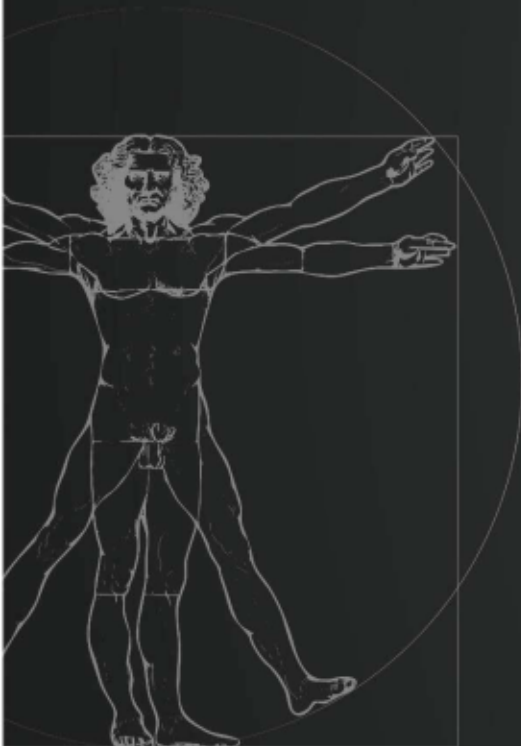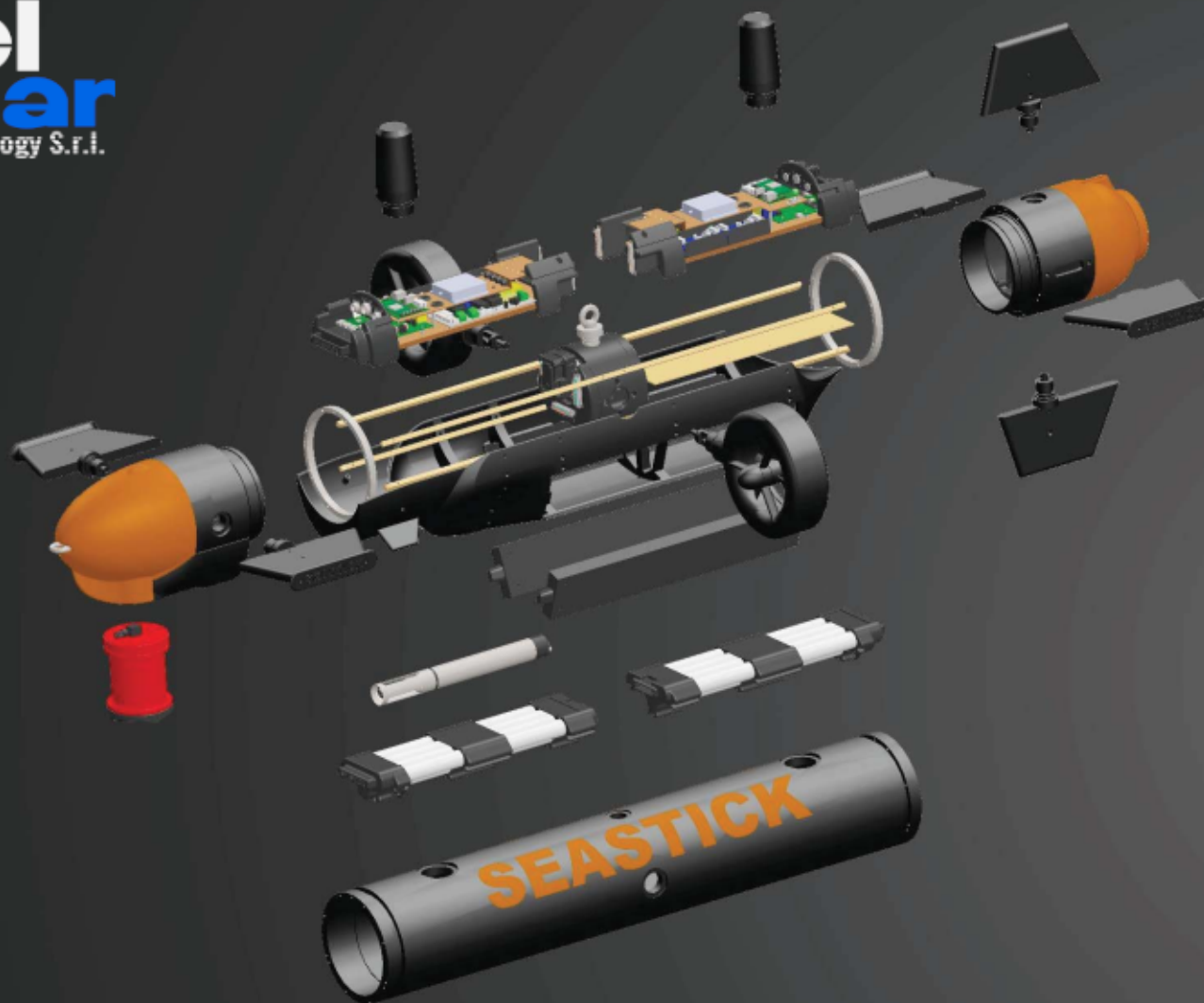
Overall dimensions: 1900 x 810 x 500 mm (75 x 32 x 20 in)
Weight in air: 82 kg (180 lbs)
Buoyancy: + 0,3 kg (+ 0,66 lbs)
Maximum operating depth: 300 m (1000 ft)
Battery and autonomy: 1,2 KWh - 10 hours
Velocity range: 1,03 to 2,06 m/s (2 to 4 knots)

SEASTICK 1000

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Holonomic movement
Multiple, reconfigurable payloads
Adaptive autonomous operation
Long range mobile sensor platform
Extreme mapping capabilities
Expanded comms array

Overall dimensions: 2970 x 870 x 870 mm (117 x 34 x 32 in)
Weight in air: 187 kg (412 lbs)
Buoyancy: + 0,3 kg (+ 0,66 lbs)
Maximum operating depth: 1000 m (3300 ft)
Battery and autonomy: 1,2 KWh - 10 hours
Velocity range: up to 2,3 m/s (4,5 knots)

SEASTICK SERIES
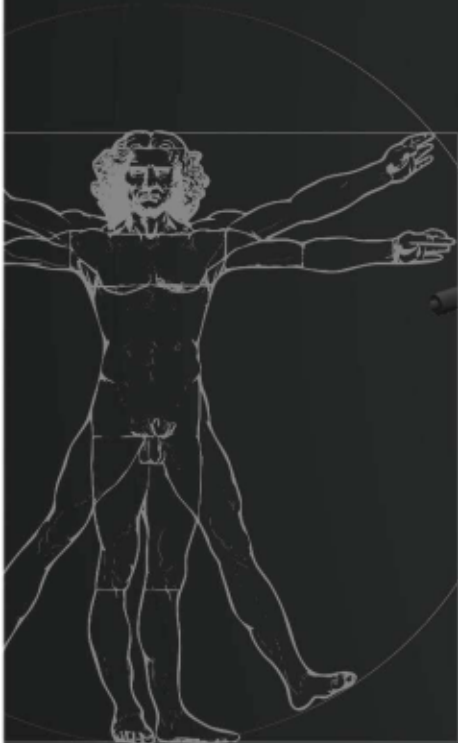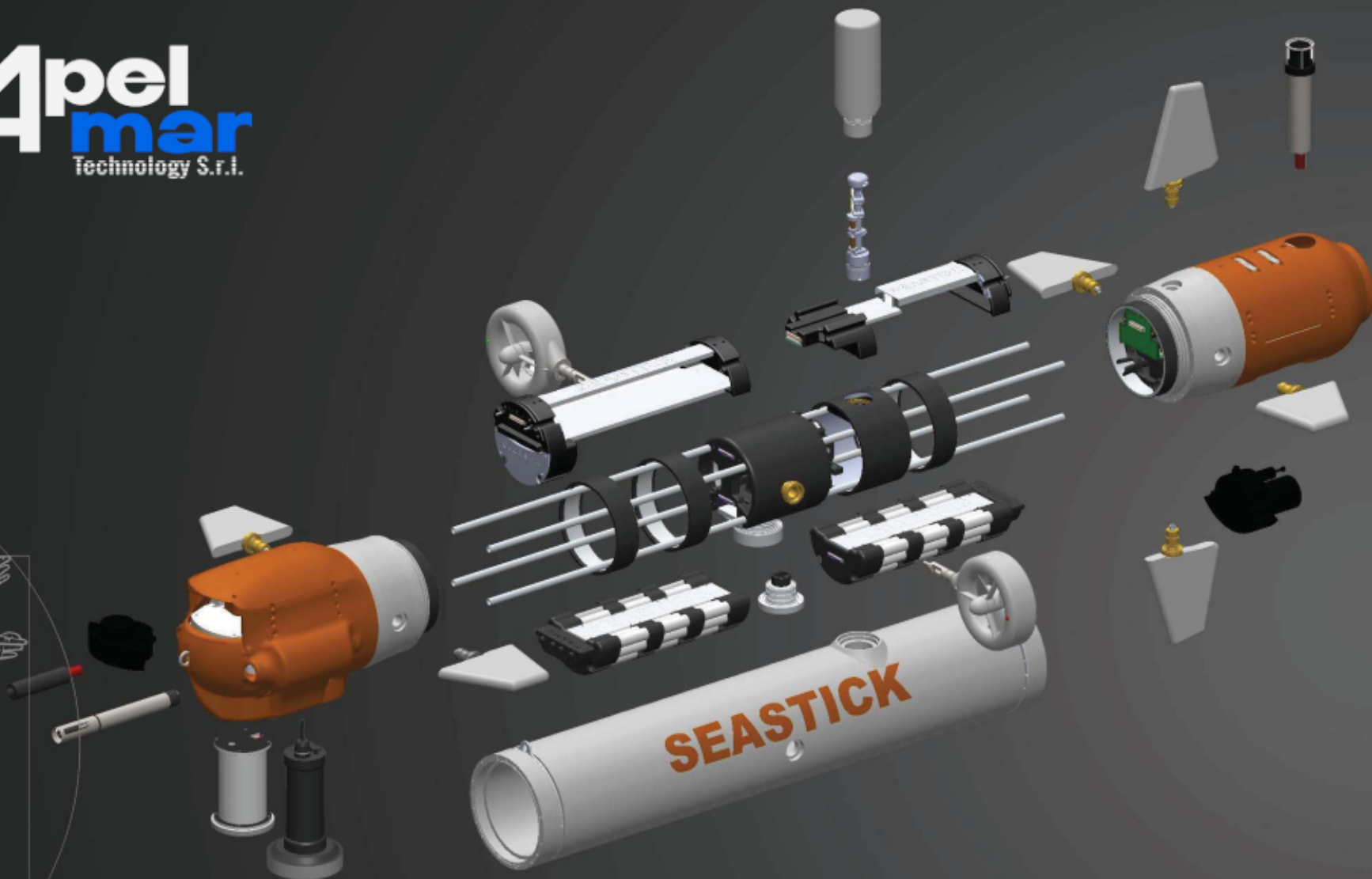# STANDARD AND OPTIONAL EQUIPMENT

EQUIPMENT	AUVino	300	1000
Polipropylene PP body	✓	✓	✓
2 Magnetic induction brushless motors	✓	✓	✓
2 Battery packs NIMH	✓	✓	✓
Onboard electronics	✓	✓	✓
GPS	✓	✓	✓
Router: wireless high power communication device (wi-fi 2.4 GHz) standard	✓	✓	✓
Deck control unit with radio link	✓	✓	✓
Dual low maintenance propellers	✓	✓	✓
Pressure sensor	✓	✓	✓
Leakage sensor	✓	✓	✓
IMU INS	✓	✓	✓
Depth sensor	✓	✓	✓

MAPPING DEVICES

	AUVino	300	1000
Range pinger altimeter	✓	✓	✓
Multibeam sonar	▬	O	O
Interferometric sonar	▬	OOO	OOOOO
Interferometric synthetic aperture sonar	▬	OOO	OOOOO
Forward looking sonar	▬	OOO	OOOO
Sub bottom profiler	▬	▬	OOOO
Sidescan interferometric sonar	▬	O	O
Sidescan sonar (entry level)	O	▬	▬

SEASTICK SERIES
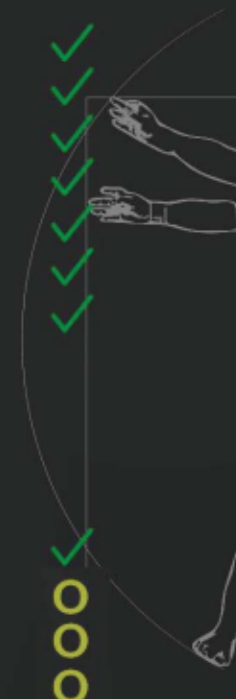
STANDARD AND OPTIONAL EQUIPMENT

SENSORS AND COMMUNICATION	AUVino	300	1000
Water samplers	O	O	O
Doppler Velocity Log	O	✓	✓
Hydrophone	O	O	O
USBL	O	O	O
Acoustic modem	O	O	O
SVP sensor	O	✓	✓
Obstacle avoidance sonar/ Echo sounder	O	O	✓
HD camera - tilt +/- 90	✓	O	O
Led illuminator for HD camera	O	O	O
Satellite communications system - Iridium	—	O	O
Laser pipeline profiling system	—	O	O
CTD probe	O	✓	✓
AIS (Automatic Identification System)	O	O	O
Customer chosen sensor	O	O	O

VEHICLE RECOVERY ACCESSORIES

	AUVino	300	1000
Recovery radio beacon	O	O	O
Flashing recovery light	O	O	O

TRAINING

	AUVino	300	1000
3 Days training (2 days in office and 1 day in water	O	O	O
On line tutorial	O	O	O
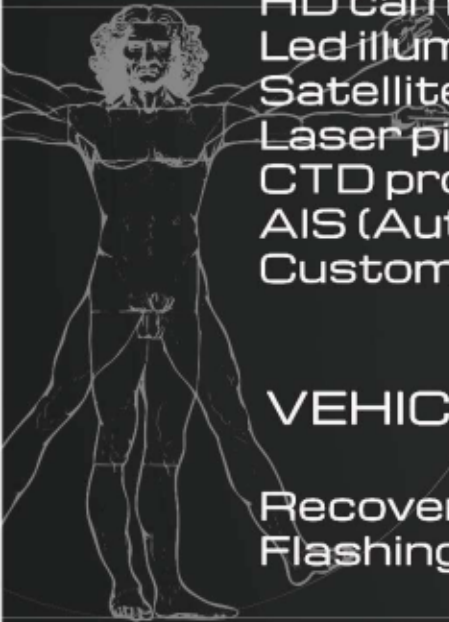
SEASTICK SERIES
STANDARD AND OPTIONAL EQUIPMENT

ACCESSORIES	AUVino	300	1000
Transport cart	O	✓	✓
Maintenance cart	O	O	O
Disassembly kit	O	O	O
Additional magnetic key	O	O	O
Additional battery pack	O	O	O
Battery charger	✓	✓	✓
RF modem	O	O	O
Router bridge wi-fi high power	✓	✓	✓
Coaxial umbilical cable (with reel and slip ring)	O	O	O
Ruggedized portable control unit	O	O	O
Control pad	✓	✓	✓

SOFTWARE	AUVino	300	1000
Integration software between for optional sensors	O	O	O
Customized software for special use / computer vision	O	O	O
Control station	✓	✓	✓
Mission planner	✓	✓	✓
Autopilot	✓	✓	✓
Open source development kit	O	▬	▬

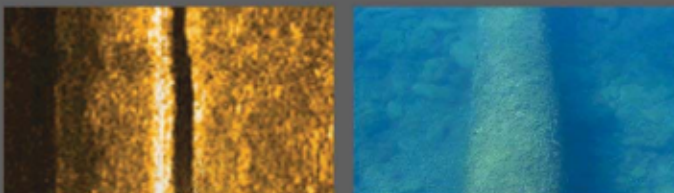✓ = DI SERIE   O = OPTIONAL   ▬ = NA

SEASTICK CONTROL STATION

The Graphical User Interface (GUI) allows to manually steering the vehicle, control On Board Sensors, program the autopilot missions and dowload data.
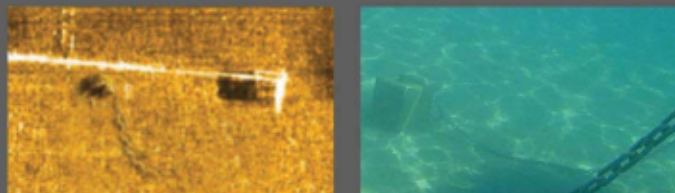

SOFTWARE AND CONNECTIVITY

The SEASTICK Control Station software allows for simple and intuitive management of vehicle maneuvering, sensors settings and alla others functionalities of our AUVs. Control of the vehicle is archieved on the surface via a Wi-Fi radio bridge and via umbilical cable or acoustic modem when underwater. The SEASTICK Mission Planning software enables the user to easily program autonomous missions in terms of routes to follow, waypoint to reach and sensor data to be gathered. This piece of software is specifically designed for immediate and easy deployment of our AUVs. All video, navigational and sensor data from the vehicle can be displayed in real time on the Control Station interface when a communication line can be established, or downloaded via umbilical cable or Wi-Fi at the conclusion of autonomous mission.sens

Sonar scan and video recording of a pipeline

Sonar scan and video recording of a chain

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