

Inspection class ROV

Mini TORTUGA



Up to 3 knot current



Azimuthal thrust
4 x 5.0 kgf



Ultra-compact and
lightweight



Depth rating 300m



SUBSEA TECH

Marine and Underwater Technologies

The Mini TORTUGA

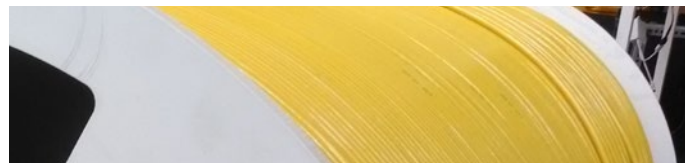
is a 300m depth rated underwater inspection robot inspired from the Tortuga ROV. Built on the same principles and following similar form factor, the Mini TORTUGA is lighter and smaller than the standard Tortuga. Each one of the 4 horizontal thrusters develops a 5.0 kgf thrust and is manually adjustable to preset orientation configurations (vectored, in line, lateral). This system allows operating the ROV in strong current conditions up to 3 knots, regardless of the direction.

Thanks to a high payload capacity and its fully integrated acoustic imaging solution, the Mini TORTUGA is the perfect match for underwater inspections in complex operational conditions (low visibility, strong currents, long range inspections, etc.).



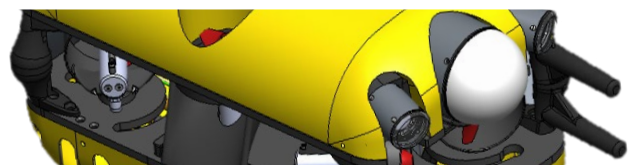
AZIMUTHAL THRUST CONTROL

Mini TORTUGA is powered by 4 horizontal thrusters (5.0 kgf thrust each) with manually adjustable orientation.



COMMUNICATION

Power Line Communication (PLC) technology allows using a single electrical pair in the umbilical up to 1,100m length, keeping the tether diameter to a minimum (8mm) and making it robust and easy to repair.



HYDRODYNAMIC FORM FACTOR

The hydrodynamic shape of the Mini TORTUGA drastically reduces the drag of the vehicle, while keeping an open frame design to ease sensor integration.

TECHNICAL SPECIFICATIONS

GENERAL ROV

Depth rating	300m
ROV dimensions	L 672 mm x W 310 mm x H 381mm
ROV weight in air	19 kg (ROV alone)
ROV max. speed	4 knots

PROPULSION AND POWER SUPPLY

Thrusters	Horizontal thrusters: - 4 x 5.0 kgf manually adjustable thrusters with 80 mm propellers and protection nozzles. Vertical thrusters: - 2 x 5.0 kgf vertical thrusters with 80 mm propellers
Power supply	230 Vac (main power or generator)
Surface power requirement	3 kW

SURFACE UNIT

Interface	Console integrated in a waterproof case 625mm x 500mm x 218 mm
Display	2 integrated 21"+17" PC screens, switchable for video, sonar and other sensors
Control	2 multifunction joysticks and preset buttons
Recorder	Data saved on integrated PC
Auto functions	Heading, depth, altitude (optional)
Ports	2x HDMI, 2x UBS, RJ45

INTEGRATED SENSORS

Front	Full HD video camera (1920 x 1080 p) 0,001lux Option: Rear full HD video camera
Pan & Tilt	Pan & Tilt on front camera
Lighting	2x 10,000 lumens front LED lighting with intensity control. LED direction manually adjustable Option: integrated LED lighting in rear camera
AHRS	Xsens MT13
Sensors	Compass, pressure (depth) sensor

TETHER

Standard	300m (9.5mm neutral / 8mm negatively buoyant), breaking strenght 500kg
Communication	Power Line Communication (PLC)
Fibre optic option	fibre optic tether (Ø15mm)

PACKAGING

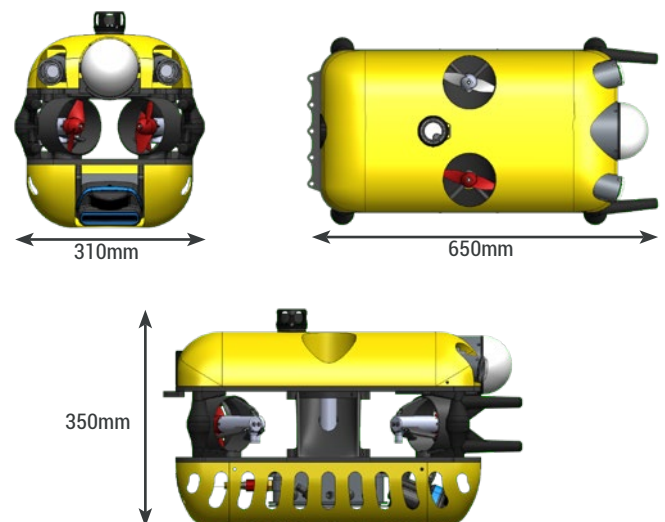
Standard	Single crate for the whole system
Option	Flight case

MAINTENANCE AND WARRANTY

Documentation	Operator/maintenance manual
Maintenance	Maintenance contract (optional)
Warranty	1 year spares and labour


OPTIONS

Imaging sonar	BluePrint Oculus or Teledyne Blueview M900 multibeam sonars
Profile sonar	Imagenex 831-A
Acoustic posit.	BluePrint SeaTrac USBL
Thickness meas.	Ultrasonic probes Cygnus
Measure CP	Buckleys UCP1-A probe
Cleaning tool	SBT-70 Subsea Tech brush
Cavitation cleaning tool	Subsea Tech cavitation lance
DVL	Waterlinked A50
Phys-chem meas.	Salinity, pH, turbidity probes, etc.
Manipulator	2G-2F Subsea Tech manipulator
Samplers	Water and sediments
Navigation	Autonav
Pan&Tilt	Pan&Tilt on rear camera



WWW.SUBSEA-TECH.COM

 st.sales@subsea-tech.com

 +33 (0) 491 517 671

 [subsea-tech](https://www.linkedin.com/company/subsea-tech)

SUBSEA TECH SAS - 167 Plage de l'Estaque, 13016 Marseille, FRANCE - Capital : 60 000 € - 485 282 370 RCS MARSEILLE