

Observation Class ROV

TORTUGA XP4-SR



Designed for Search and Rescue missions



Max speed
2.5 knots



4 vertical thrusters, 14 kg each
for pitch and roll control



300 m depth



SUBSEA TECH

Marine and Underwater Technologies

The TORTUGA XP4-SR is an ultra-compact underwater observation robot specifically designed for search and rescue missions, target detection, identification, and geolocation, and more broadly for all types of seabed inspection missions.

Certified to a depth of 300 m, its compact form factor (44 kg) allows for rapid deployment with minimal logistical resources, even in demanding operational conditions.

The XP4-SR integrates onboard batteries providing up to 4 hours of autonomy, offering true operational freedom in the field without reliance on a continuous external power supply.

It is equipped with side-scan sonar (SSS), forward-looking sonar (FLS), an automatic navigation system based on INS/DVL/USBL, and acoustic image mosaicking software. This combination of sensors makes it a particularly well-suited tool for search missions involving persons or submerged objects, as well as mine countermeasure (MCM) and UXO operations.



PROPULSION

The system includes four horizontal thrusters and four vertical thrusters, each delivering 14 kg, ensuring excellent maneuverability and precise control of underwater movements.



COMMUNICATION

The XP4-SR uses an umbilical with PLC (power-line communication), ensuring reliable data transmission, high robustness, simplified maintenance, and optimized operating costs.



PILOT CONSOLE

The watertight console with 21" and 17" screens integrates video, sonar, navigation, and sensors, providing a complete interface for smooth, efficient, and comfortable missions for the operator.

TECHNICAL SPECIFICATIONS

ROV

Max. depth	300 m
Dimensions	L 600 mm x W 728 mm x H 401 mm
Weight	44 kg in air, neutrally buoyant in water
Max. speed	2.5 knots
Payload	10 kg (in water) and 20 kg via lifting frame (dry)

PROPULSION AND POWER

Thrusters	Horizontal thrusters: 4 x 14 kg, manually adjustable orientation. 140 mm propellers with protective nozzles. Vertical thrusters: 4 x 14 kg. 140 mm propellers
Power supply	230 VAC or batteries
Power required	3,8kW (230V - 16 A)
Batteries	Onboard pack: 1800 Ah (2x900 Ah @ 29V). Surface station: 1200 Wh Autonomy: up to 4 hours

SYSTEM CONTROL

Control unit	Integrated console in a PeliCase Dimensions: 634 mm x 505 mm x 220 mm
Affichage	2 interchangeable screens, 21" + 17" (video, sonar, navigation, and other sensors)
Controls	2 multifunction joysticks and preconfigured buttons
Recorder	Data saved on the integrated PC
Auto functions	Heading, depth, attitude Altitude and position (optional)
Connections	2x HDMI, 2x USB, RJ45

INTEGRATED SENSORS

Front camera	Full HD 1080p (4K optional), 130° lens in air / 100° in water, 60 FPS, 0.01 Lux Option: Full HD rear camera
Pan & Tilt	On the front camera
Lighting	2x 10,000 lumens LED at the front with intensity control Manually adjustable LED orientation
AHRS	Xsens MTi3
Sensors	Pressure sensor (depth), gyroscopic compass + accelerometers

UMBILICAL

Standard	300 m (9.5 mm neutral / 8 mm floating) Breaking strength: 500 kg Other lengths available on request
Communication	PLC (power-line communication)

PACKAGING

Standard	Wooden crate for the full system
Option	Flight case

MAINTENANCE AND WARRANTY

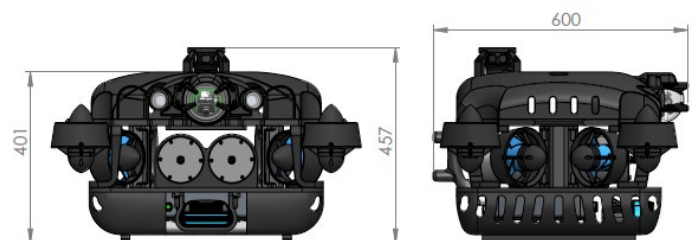
Documentation	Operator/maintenance manual
Maintenance	Maintenance contract (optional)
Warranty	1 year, parts and support
Technical support	Response time: < 8 h (business days) Resolution time: < 72 h

OPTIONS

For your missions, the TORTUGA XP4-SR can integrate a wide range of sensors and equipment.

OUR SUGGESTIONS:

Control unit	14" rugged PC + joystick console
Imaging sonar	Blueprint Oculus (multibeam)
Side-scan sonar	Blueprint Starfish
Acoustic positioning	Blueprint SeaTrac USBL
Metal detector	JW Fischer RMD-1
Manipulator arm	EG-2F Subsea Tech
DVL	Waterlinked A50
Navigation	Automatic navigation software
Pan & Tilt	On the rear camera



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