

# Mini-ROV Observer



150m depth



3 thrusters



Up to 4h autonomy



2 color video cameras



Ultra-portable

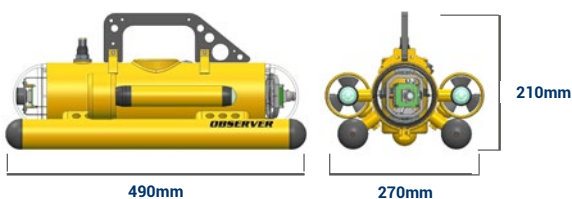


**SUBSEA TECH**  
Marine and Underwater Technologies

## The Observer Mini-ROV

is an ultra-portable underwater inspection robot equipped with two high-resolution color video cameras (1 full HD camera in IP version), one with pan and tilt capabilities, and LED lighting. Embedded batteries provide up to 4 hours of autonomy, enabling operation in remote areas down to a depth of 150 meters.

With an ancillary plug, various accessories such as sonars, gauges, and manipulators can easily be mounted on the Observer. The entire system, including its umbilical, is packaged in a single transport case with a total weight of 32 kg.



### VIDEO CAMERAS

The Observer Mini-ROV embeds 2 high sensitivity 700 TVL video cameras (1 full HD camera in IP version). Rear camera is fix while front camera is mounted on Pan & Tilt.



### BATTERIES

Thanks to its two NiMH embedded batteries, the Observer Mini-ROV has fully autonomous energy supply allowing operations up to 4h in the most remote locations.



### ANCILLARY PLUG

The quick plug interface available on the Observer Mini-ROV allows easy integration of many options such as sonars, USBL positioning system, US and CP probes, etc.

# TECHNICAL SPECIFICATIONS

## MAIN FEATURES

|                |  |
|----------------|--|
| Depth rating   | 150m   |
| ROV dimensions | L 490mm x l 270mm x H 210mm                  |
| ROV weight     | 6,4kg in air / neutral in water              |
| ROV max. speed | 2 knots (max. operational current 1.5 knots) |

## PROPULSION AND POWER SUPPLY

|                |   |
|----------------|---|
| Thrusters      | 3 fully-flooded brushless thrusters : 2 horizontal and 1 vertical |
| Batteries      | NiMH accumulators, 4h autonomy                                    |
| External power | External power 220 VAC (110 VAC on demand)                        |

## SYSTEM CONTROL

|                |  |
|----------------|--|
| Piloting       | Console integrated in a waterproof case or PC (IP version) |
| Video display  | 8" LCD screen with data overlay or 17" (IP version)        |
| Control        | 2 multi-function joysticks and soft touchpad               |
| Recorder       | Digital recorder/reader on SD card                         |
| Auto functions | Heading, depth, Up/Down, speed                             |
| Video outputs  | 2 RCA connectors   |

## INTEGRATED SENSORS

|                    |   |
|--------------------|---|
| Front/rear cameras | Colour video cameras, 700 TVL, 0,01 lux, Front full HD 1080p (IP version) |
| Pan & Tilt         | Pan & Tilt unit integrated on front camera, optional on rear camera       |
| Lighting           | Front : 2 x 1200 lumens, Rear : 1000 lumens , intensity control           |
| Sensors            | Compass, depth, temperature, leak detector (internal moisture level)      |

## UMBILICAL

|                  |   |
|------------------|---|
| Standard         | 100m : 80m (Ø 6,3mm) + 20m buoyant (Ø 7,9mm), integrated Kevlar braid                     |
| Optional lengths | Extensions with customized lengths up to 300 m on demand<br>500 m in long-distance option |

## PACKAGING

|            |   |
|------------|---|
| Transport  | All in one transport case including ROV, console, umbilical and transformer |
| Dimensions | L 640mm x l 500mm x H 380mm   |
| Weight     | 32 kg   |

## MAINTENANCE AND WARRANTY

|               |  |
|---------------|--|
| Documentation | Operator manual in hard and soft versions        |
| Maintenance   | No specific maintenance needed                   |
| Warranty      | 1 year parts and labor excluding transport costs |

## OPTIONS


|                        |                                  |
|------------------------|----------------------------------|
| Mechanical sonar       | Tritech Micron DST or equivalent |
| Acoustic posit.        | BluePrint Seatrac USBL           |
| Thickness measurement  | Cygnus US gauges                 |
| CP measurement         | Buckleys CP probes               |
| Physico-chem. measures | Salinity, pH, turbidity gauges   |
| Manipulator            | 2 functions manipulator          |
| Samplers               | Water and sediments samplers     |
| Defect scaling         | Laser pointer tool with software |
| Video enhancement      | LYYN Hawk Board                  |
| WiFi link              | Wifi video transmission          |
| Support service        | Annual maintenance contract      |

| LEVELS OF FINISHES                 |   | STARTER             | SENSE               | MAX                 | ULTRA               | IP               |
|------------------------------------|---|---------------------|---------------------|---------------------|---------------------|------------------|
| CAMERAS                            | Front color camera                            | 700 TVL<br>0,01 lux | 700 TVL<br>0,01 lux | 700 TVL<br>0,01 lux | 700 TVL<br>0,01 lux | Full HD<br>1080p |
|                                    | Front Pan & Tilt                              |                     | ●                   | ●                   | ●                   | ●                |
|                                    | Rear color camera<br>700 TVL 0,01 lux         |                     |                     | ●                   | ●                   |                  |
|                                    | Rear tilt                                     |                     |                     |                     | ●                   |                  |
| LIGHTING                           | 2 x front LED 1200 lumens with dimming        | ●                   | ●                   | ●                   | ●                   | ●                |
|                                    | Rear LED lighting<br>1000 lumens with dimming |                     |                     | ●                   | ●                   |                  |
| SENSORS<br>AUTOMATIC<br>MODES      | Water ingress                                 | ●                   | ●                   | ●                   | ●                   | ●                |
|                                    | Temperature                                   |                     | ●                   | ●                   | ●                   | ●                |
|                                    | Pressure/Depth                                |                     | ●                   | ●                   | ●                   | ●                |
|                                    | Compass                                       |                     |                     | ●                   | ●                   | ●                |
| ACCESSORIES<br>PLUG AND<br>BRACKET | Basics  |                     | ●                   | ●                   | ●                   | ●                |
|                                    | Additional                                    |                     |                     |                     | ●                   |                  |
| UMBILICAL                          | Umbilical length*                             | 50m                 | 100m                | 100m                | 150m                | 100m             |
| CONSOLE                            | Console in waterproof case                    | ●                   | ●                   | ●                   | ●                   |                  |
|                                    | PC and joystick                               |                     |                     |                     |                     | ●                |
|                                    | Integrated video recorder                     |                     | ●                   | ●                   | ●                   | ●                |
| TRANSPORT                          | ROV transport bag                             | ●                   |                     |                     |                     |                  |
|                                    | Pelicans                                      |                     | ●                   | ●                   | ●                   | ●                |

\* Umbilical expandable up to 300 m

WWW.SUBSEA-TECH.COM

 st.sales@subsea-tech.com

 +33 (0) 491 517 671

 subsea-tech

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