



# 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**

	FE		

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

### 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)
LIMBILICAL	

#### **UMBILICAL**

Standard	100m : 80m (Ø 6,3mm) + 20m buoyant (Ø 7,9mm), integrated Kevlar braid
Optional lengths	Extensions with customized lengths up to 500 m on demand

## **PACKAGING**

Transport	All in one transport case including ROV, console, umbilical and transfor- mer
Dimensions	L 640mm x I 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 measure- ment	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
	Front color camera	700 TVL 0,01 lux	700 TVL 0,01 lux	700 TVL 0,01 lux	700 TVL 0,01 lux	Full HD 1080p
	Front Pan & Tilt		•	•	•	•
CAMERAS	Rear color camera 700 TVL 0,01 lux			•	•	
	Rear tilt				•	
	2 x front LED 1200 lumens with dimming	•	•	•	•	•
LIGHTING	Rear LED lighting 1000 lumens with dimming			•	•	
	Water ingress	•	•	•	•	•
	Temperature		•	•	•	•
SENSORS AUTOMATIC MODES	Pressure/Depth		•	•	•	•
	Compass			•	•	•
	Automatics modes			•	•	•
ACCESSORIES PLUG AND	Basics		•	•	•	•
BRACKET	Additional				•	
UMBILICAL	Umbilical lenght*	50m	100m	100m	150m	100m
	Console in waterproof case	•	•	•	•	
CONSOLE	PC and joystick					•
	Integrated video recorder		•	•	•	•
TRANSPORT	ROV transport bag	•				
TRANSPURI	Pelicase		•	•	•	•

<sup>\*</sup> Umbilical expandable up to 500 m

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