

# Mini-ROV Guardian



Depth rating 150 m



5 thrusters



2 colour video cameras



Ultra-portable

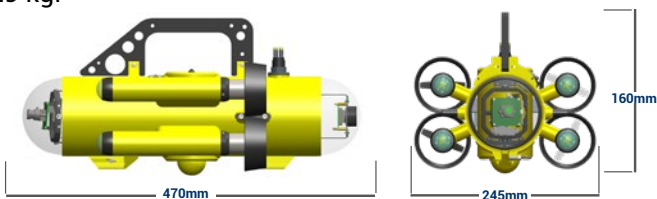


**SUBSEA TECH**  
Marine and Underwater Technologies

## The Guardian Mini-ROV

is an ultra-portable underwater inspection robot rated for depths of up to 150 meters. It is equipped with 4 horizontal and 1 vertical thrusters, ensuring maneuverability in various underwater environments. Fitted with 2 high-resolution color video cameras (1 full HD camera in IP version), including one with pan and tilt capabilities, and LED lighting, the Guardian is specifically designed for long-range missions (> 400m).

With an ancillary plug, various accessories such as sonars, gauges, and manipulators can easily be mounted on the Guardian. The complete system, including its umbilical, is packaged in a single transport case with a total weight of 29 kg.



### VIDEO CAMERAS

Le Guardian Mini-ROV embeds 2 high sensitivity 700 TVL video cameras and 1 full HD camera in IP version. Read camera is fix while front camera is mounted on Pan&Tilt.



### PROPULSION

Equipped with 4 horizontal and 1 vertical thrusters, the Guardian Mini-ROV can reach a 3 knots speed.



### ANCILLARY PLUG

The quick plug interface available on the Guardian 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 470mm x W 254mm x H 160mm
ROV weight	4,5kg in air / neutral in water
ROV max. speed	3 knots (max. current 2 knots)

## PROPULSION AND POWER SUPPLY

Thrusters	5 fully-flooded brushless thrusters : 4 horizontal and 1 vertical
Power supply	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 camera 700 TVL, 0,01 lux
Pan & Tilt	Pan&Tilt unit integrated on front camera, optional on rear camera
Lighting	Front: 4 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 500m on demand

## PACKAGING

Transport	Single transport case including ROV, console, umbilical and transformer
Dimensions	L 640mm x l 500mm x H 380mm
Weight	29 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


Acoustic camera	2D imaging sonar Teledyne Blueview M series or BluePrint Oculus
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 scaling tool with software
WiFi link	Wifi video transmission on external screen
Contrat support	Annual maintenance contract

LEVELS OF FINISHES		STARTER	SENSE	MAX	ULTRA	IP
CAMERAS	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		●	●	●	●
	Rear color camera 700 TVL 0,01 lux			●	●	
	Rear tilt				●	
LIGHTING	2 x front LED 1200 lumens with dimming	●	●	●	●	●
	Rear LED lighting 1000 lumens with dimming			●	●	
SENSORS AUTOMATIC MODES	Water ingress	●	●	●	●	●
	Temperature		●	●	●	●
	Pressure/Depth		●	●	●	●
	Compass			●	●	●
	Automatics modes			●	●	●
ACCESSORIES PLUG AND BRACKET	Basics		●	●	●	●
	Additional				●	
UMBILICAL	Umbilical lenght*	50m	100m	100m	150m	100m
CONSOLE	Console in waterproof case	●	●	●	●	
	PC and joystick					●
	Integrated video recorder		●	●	●	●
TRANSPORT	ROV transport bag	●				
	Pelicase		●	●	●	●

\* Umbilical expandable up to 500 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