

# SB100PRO



Unmanned Surface Vehicle

## Blue Floating Technology

for exploration and preservation  
of the aquatic environment

## The **SB100 PRO** is the most versatile USV for your surveys in sheltered waters

### Versatile tool

**SB100 PRO** is a compact multipurpose Unmanned Surface Vehicle.

It can host all types of payloads, in order to meet needs related to:

- # Hydrography
- # Water Analysis
- # Engineering Inspection
- # Scientific Research
- # Search & Rescue
- # Water Surface Cleaning.



### All-in-one solution

Designed and manufactured under “**ready-to-nav**” concept, SB100 PRO has everything necessary to launch and work.

# Advantages vs. conventional vessels



## FAST AND EASY DEPLOYMENT

It can be transported in the trunk of the car or a small van.  
Easy to deploy and recover from the water.



## COST REDUCTION

Reduction of operating costs. One-man operated.  
Reduction of maintenance costs. Electric propulsion and heavy duty components.



## NO HUMAN RISK

Unmanned. Fully operated from the ground.  
Access to confined spaces, shallow waters or hazardous areas.



## AUTOMATION

Semi-autonomous system. It can be used manually or with autopilot.  
Real-time data from the ground, or even from the office if 4G/LTE connection is available.



## FRIENDLY

Easy to use. A very fast learning curve with our 1-day training plan.  
Respectful of the environment. Fully electric, no fluids, non toxic materials.

- Tasks automation
- Real-time data from the ground



- Easy to transport and deploy
- One-man operated

Access to confined spaces and high-risk areas





## USV Platform

Floating unit

**Positioning**  
GNSS RTK

**Long range telemetry**  
Dual channel system

**True Heading**  
Satellital compass

**BlackBox**  
Complete unit inside

**Collision avoidance**  
LIDAR technology

**Propulsion**  
Dual thrusters

**FPV camera**  
IR Full-HD

**Batteries**  
Fast replacement system

**Heavy duty hull**  
Unsinkable composites

**Payload bay**  
with custom racks



## Blackbox

The brain inside

**Industrial grade computer**

Intel i5 series  
16 Gb RAM  
512 Gb SSD m2

**Power outputs**  
5 V, 12 V, 24 V

**Heavy duty case**  
Transportable  
Aluminium heatsink  
IP protection

**Payload data ports**  
USB  
Ethernet  
RS 232 / RS 422  
Bluetooth



## Ground Station

Connect to your payload

**Sun shader  
and screen protector**

**Extended battery  
and external supply system**

**Keyboard  
and inner space**

**Rugged case  
Transport IP protection**



**Tablet PC**  
Microsoft Surface Pro

**USV remote desktop**  
4G/LTE or integrated Wifi system

**GNSS RTK Base**  
with RTCM radio corrections

## Controller

Move your USV

**Long Range**  
Enhanced dual system

**Manual or autopilot**  
Easy to use and program

**Dedicated Software**  
Programmable autopilot with  
routes and areas



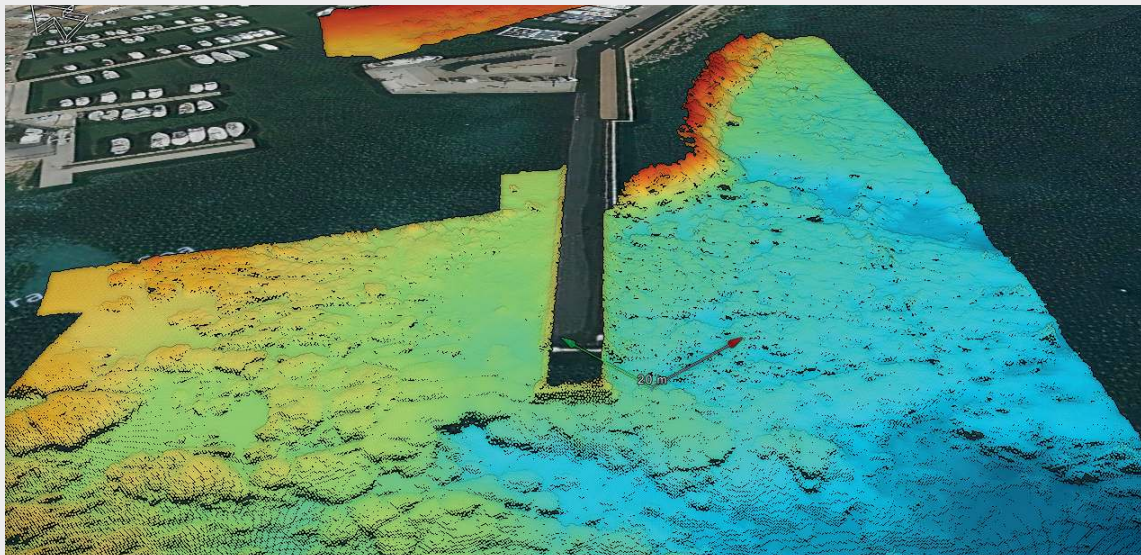
**Touch-screen**  
High brightness

**FPV camera view**  
Low latency Full-HD

**Physical Buttons**  
Customizable functions

## Hydrography

Applications



### Available Payload

- # Single Beam Echosounder
- # Multi Beam Echosounder
- # SVS /SVP
- # ADCP
- # Sub-bottom profiler

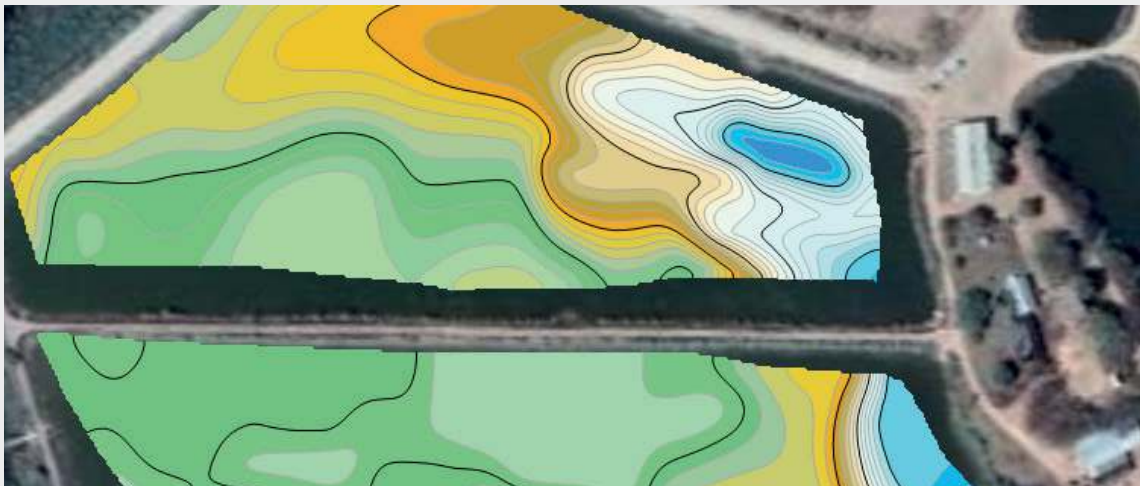
### Specific Applications

- # Engineering projects
- # Maritime works
- # Oil & gas
- # Dredges
- # Environmental studies



## Water quality

Applications



Available

### **Payload**

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- # Multiparametric sounder
- # Water sample dock

Specific

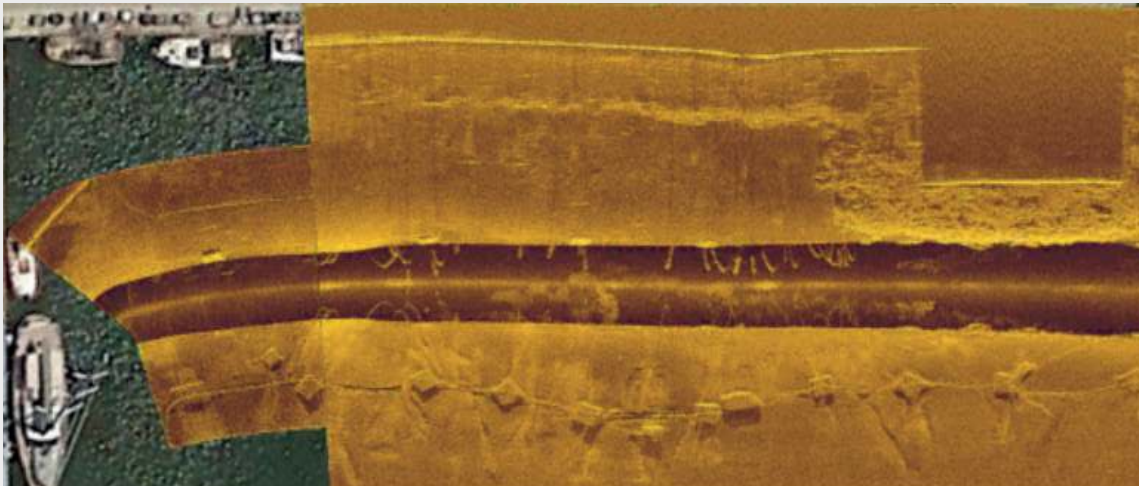
### **Applications**

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- # Aquaculture
- # Mining
- # Environmental law compliance
- # Scientific research

## SAR & inspection

Applications



Available

### Payload

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- # Sidescan sonar
- # Thermal camera
- # Underwater camera
- # LIDAR
- # Thickness probe

Specific

### Applications

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- # Missing at sea search
- # Archeology
- # Mooring and sealines inspection
- # Search for invasive or endangered species



# Technical specifications

## Size and weight

Measurements	103 cm x 75 cm x 55 cm
Weight (no batteries)	31 Kg
Draft	15 cm
Material	Fiberglass composite

## Positioning

System	GNSS RTK
Multiconstellation	Yes
Multiband	Yes
RTK corrections	Integrated Base or NTRIP

## USV control system

Controller	5,5' touchscreen
Software	QGC based
Control modes	manual, auto (waypoints) auto (survey), DP1

## Blackbox

CPU	Intel i7, 16Gb RAM
OS	Windows 10 Pro
Data (in/out)	USB, Ethernet, RS232, RS422
Payload power supply	5V, 12V, 24V

## Performance

Maximum load	15 Kg
Work speed	1 m/s
Range	1,5 Km native or unlimited 4G/LTE
Endurance	up to 3 h @ 1m/s (thrusters) Up to 10 h (systems) (Fast battery change < 30 sec)

## Power system

Batteries	1 x Systems & 1 x Thrusters
Battery type	LiFePo4 > 2000 cycles
Capacity	30Ah @ 12V (each)
Charger included	15 Ah

## Payload data link

Comm type	Remote link to USV blackbox
Comm channel	Integrated Wifi or 4G/LTE
Station interface	Microsoft Surface Pro
OS	Windows 10

## Environment

Operating temperature	0° C to 30° C
Storage temperature	0° C to 40° C
Protection Index	IP 65

## Company

# Aquatic tasks, easier, safer and cost-effective, the vision of SEABOTS

- # A **GPA INNOVA** company, focused in the design and development of **BLUE FLOATING TECHNOLOGY** for exploration and preservation of aquatic environments.
- # Located in the heart of **BARCELONA**, with more than 6,000 sqm of new facilities, **GPA GROUP** develops its activity around design and manufacturing of industrial machinery, robotics, electronics, medical devices and chemicals.
- # **GPA INNOVA** has been the fastest growing Spanish industrial goods company in the last 3 years, according to the Financial Times,



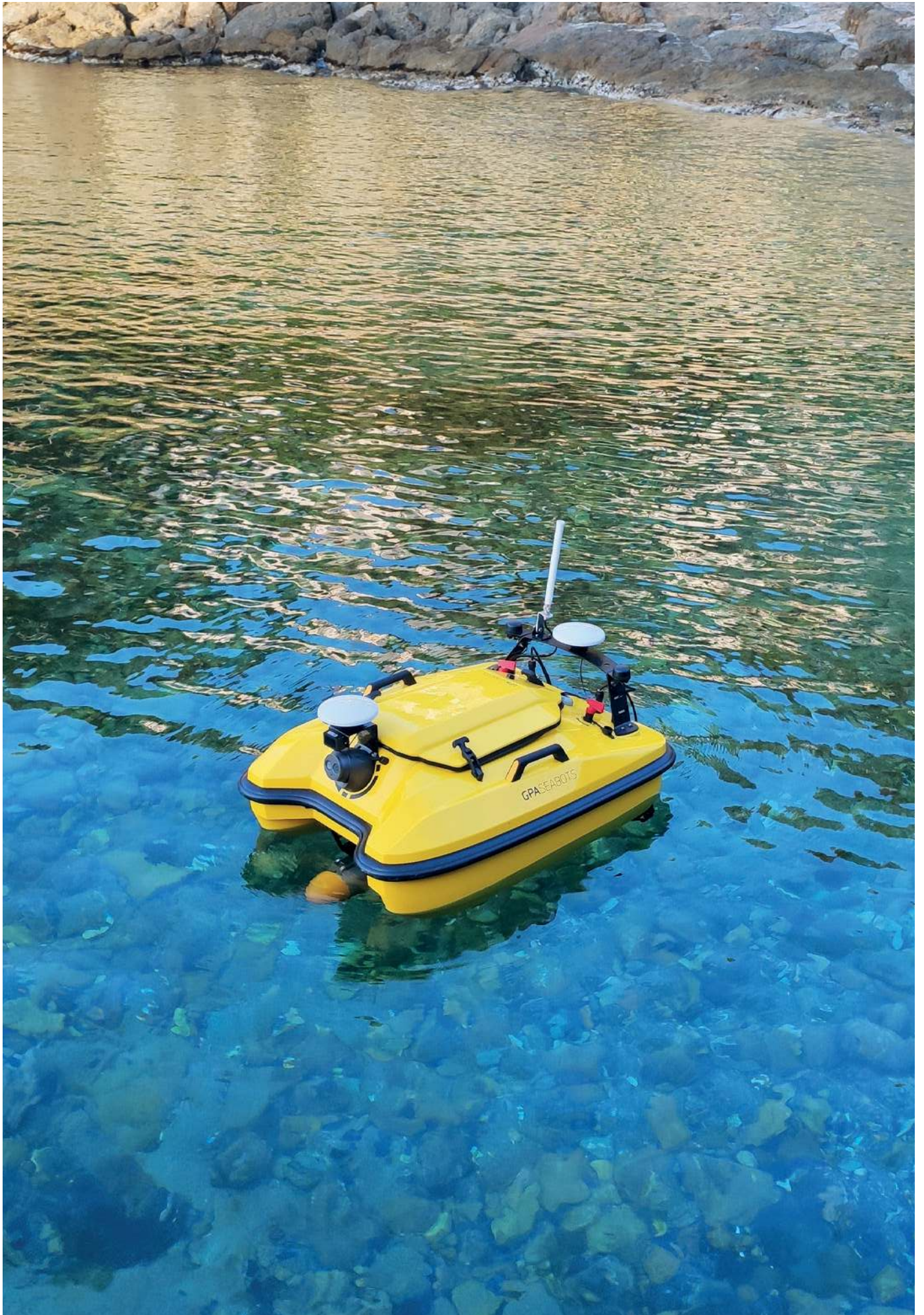
Design, development, manufacturing and customer services

A multidisciplinary team to face all kinds of technological challenges



Great facilities at the heart of Barcelona, near the sea







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