

GPASEABOTS

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

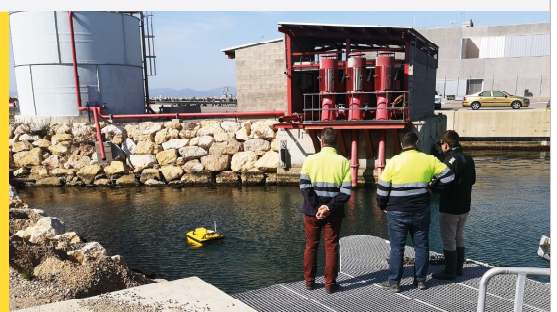
Easy to use. A very fast learning curve with our 1-day training plan.
Respectful of the environment. Fully electric, no fluids, non toxic materials.

- 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

BlackBox
Complete unit inside

True Heading
Satellital compass

Collision avoidance
LIDAR technology

Propulsion
Dual thrusters

Batteries
Fast replacement system

FPV camera
IR Full-HD

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

Touch-screen
High brightness

FPV camera view
Low latency Full-HD

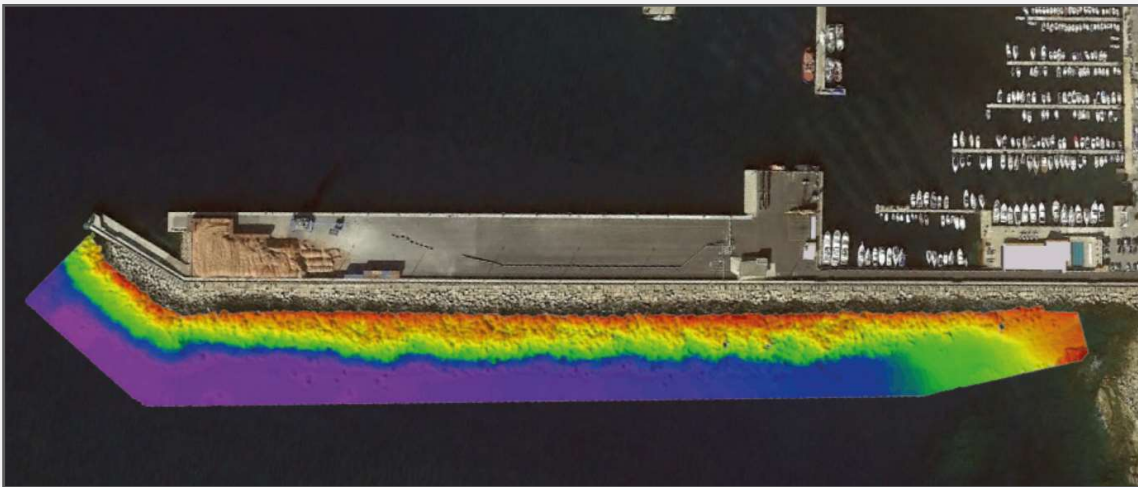
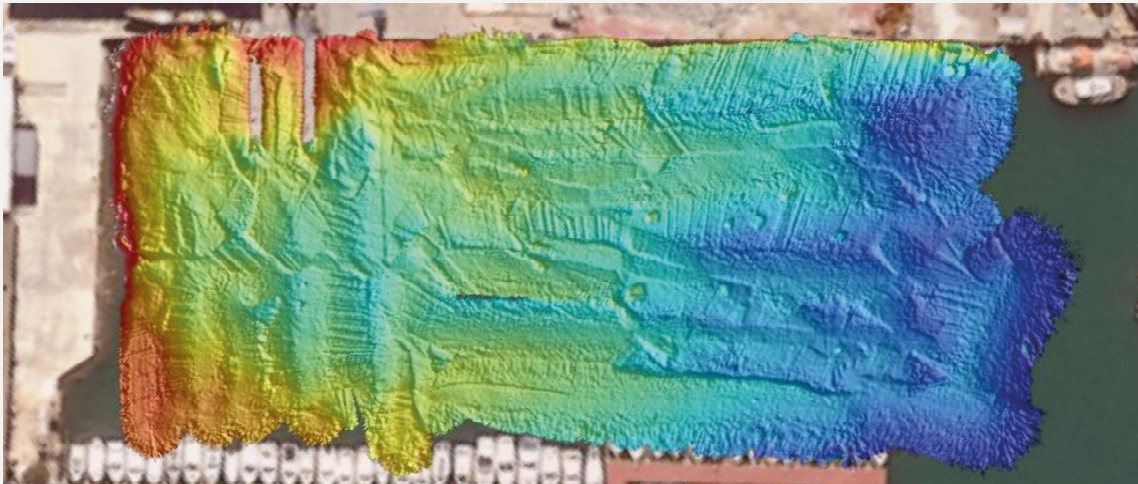
Dedicated Software
Programmable autopilot with
routes and areas

Physical Buttons
Customizable functions



Hydrography

Applications



Available

Payload

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

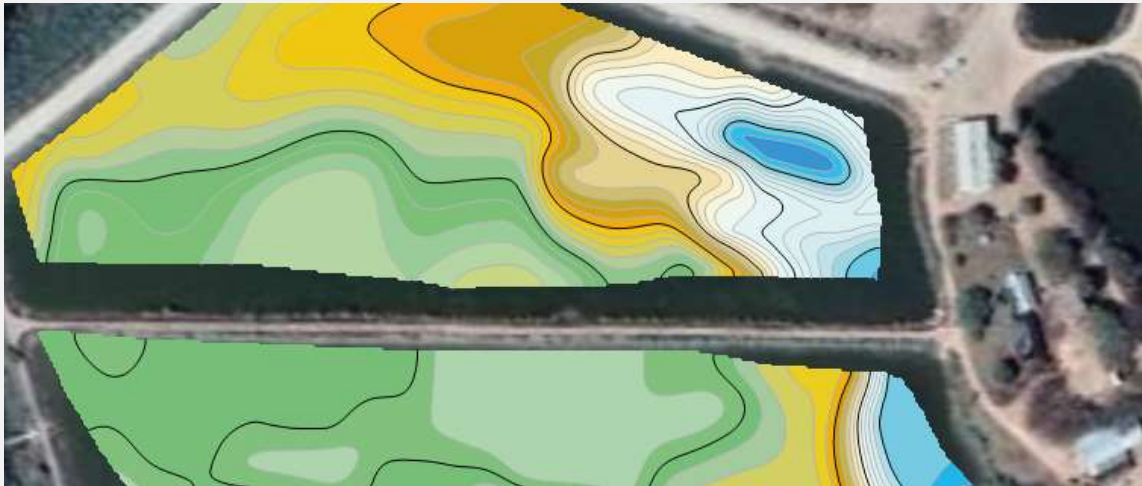
Specific

Applications

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

Water quality

Applications



Available

Payload

- # Multiparametric sounder
- # Water sample dock

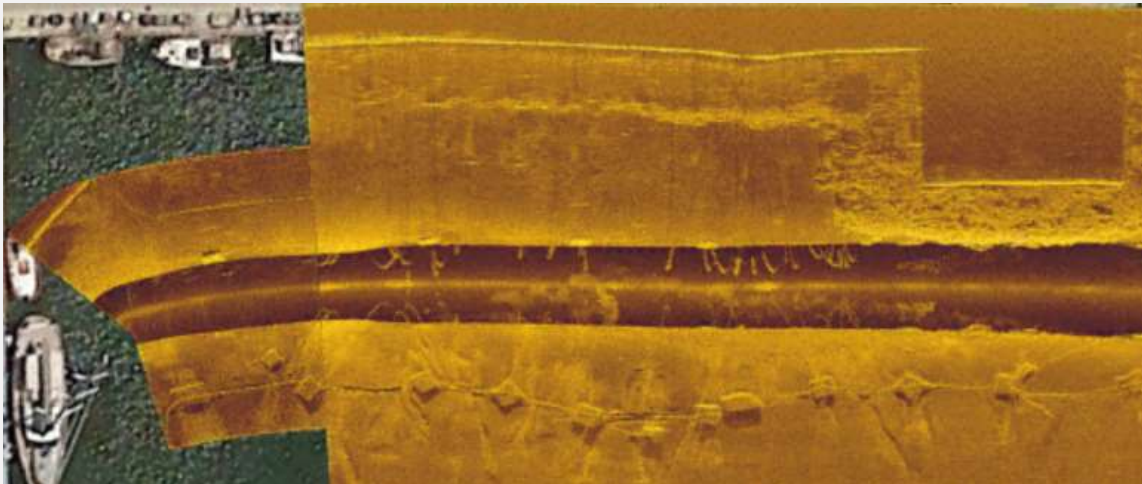
Specific

Applications

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

SAR & inspection

Applications



Available

Payload

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

Specific

Applications

- # 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 i5, 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 **GPASEABOTS**

- # 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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