# BLU INAV







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## Embrace our vision

We are dedicated to simplifying the navigation experience making it smart, accessible and intuitive for all. We want to change habits and encourage all boaters to embrace our intuitive technology with the aim to significantly reduce the impact on oceans, seas and rivers.

#### Protected environment

Our commitment to the Ocean guides all our actions. By encouraging hybrid boating, we strive to reduce carbon emissions, the use of toxic fluids and physical anchors as well as vibrations and noise. We promote circular economy and local supply chains to minimize our carbon footprint.

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## Simplified navigation

We believe that the boating experience should be effortless and accessible to all. With that purpose in mind, our integrated solutions leverage electric motors reactivity to allow intuitive navigation, making it as simple as a clic. Combining our teams expertise and technologies together, we've enhanced the user experience through outstanding maneuverability placing pleasure as frontend.



## Reconnected with nature

We aim to bring boating back to its essence: a quiet, emission-free journey. We strive to give you the freedom to immerse yourself in nature while safeguarding its delicate balance.

## Our team

We are a team of passionate enthusiasts and experts committed to making a positive impact on our seas, oceans, rivers and lakes.

We bring together professionals from various fields, including hardware and software engineering, technical development, supply chain, marketing, sales, and customer support, all driven by a shared goal: to innovate for sustainable boating. Proud of our 100% French manufacturing, we design, develop, and produce our solutions in Arcachon, in western France, ensuring high-quality standards and seamless integration.

BlueNav is part of French Tech dedicated to providing smooth, reliable, and eco-friendly navigation experiences. From our advanced propulsion systems to our intuitive software solutions, the team is focused on creating products that simplify and enhance the boating experience while remaining committed to sustainability.



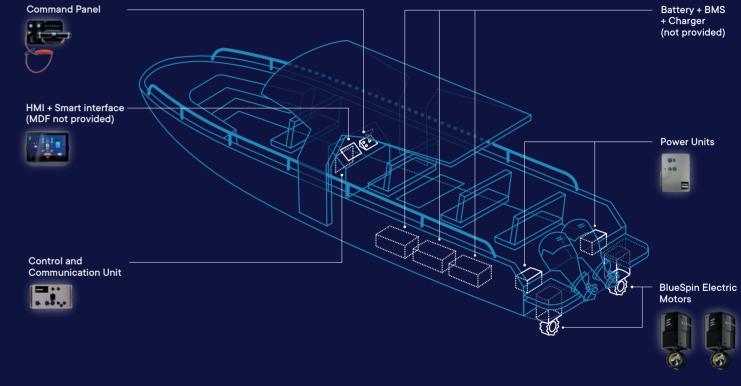
## **Smart Hybrid Boating Solutions**

Experience cutting-edge innovation with our all-in-one electric propulsion system. Designed to hybridize most kind of boats, it replaces the need for additional bow / stern thrusters. Aside its silent, responsive and sensitive propulsion, it offers unmatched maneuverability, a virtual anchoring feature, and advanced navigation assistance for precise heading, course, and speed control.

With integrated connectivity, BlueNav ensures proactive support and continuous optimization of your boating experience. Transform your boat with a solution that combines smart technology, reactivity and intuitive control. Reconnect with nature and rediscover the pure pleasure of navigation.



## The BlueNav Solution





## Software

The BlueNav HMI is installed as an application on your MFD screen. On top of the usual information and functionalities, it provides additional features that will enhance your navigation experience.

By connecting our control and communication unit to your NMEA 2000 network, you will also be able to view your navigation information (boat speed, battery status, remaining time range, angle of thrust, kW power for each motor) in one place. Compatible with leading MFD brands.

SIMRAD GARMIN FURUNO B&G Raymaríne LOWRANCE



## Smart navigation features

## POSITIONING 2 Virtual Anchor xTx perturbations, such as wind or current. AUTOPILOT $\widehat{\phantom{a}}$ Heading Hold the boat's heading during navigation. $\widehat{\widehat{A}}$ Course Hold Drift ×× Waypoint Tracking $(\mathbf{X})$ **Cruise Control** navigation at a constant speed. DOCKING 360° Docking facilitating maneuvers in tight areas. ⋒⊒ Lateral Docking along its transversal axis.

The Virtual Anchor is a software feature of the BlueSpin system that maintains the ground position (GPS coordinates). The motors position the boat's bow facing of main perturbations, such as wind or current.

Heading Hold is an autopilot software feature of the BlueSpin system, which maintains the boat's heading during navigation.

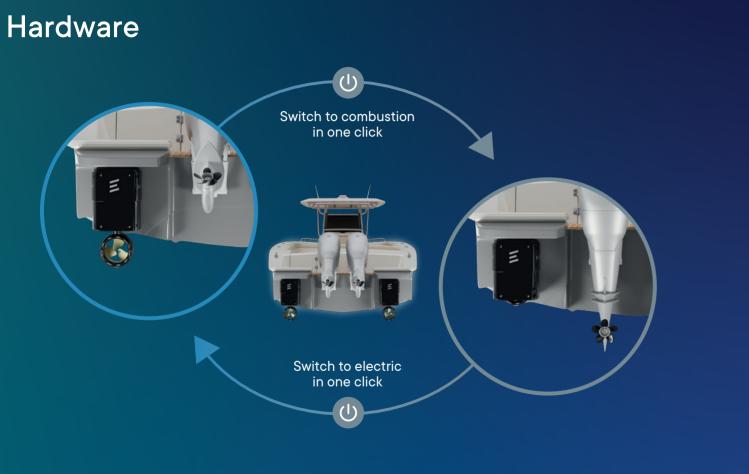
Course Hold is an autopilot software feature of the BlueSpin system, which maintains the boat's heading during navigation with drift compensation.

Waypoint Tracking is an autopilot software feature of the BlueSpin system enabling the boat to reach one or more waypoints defined in a navigation app.

The Cruise Control is an autopilot software feature of the BlueSpin system, enabling navigation at a constant speed.

The responsiveness of the docking system developed by BlueNav enables smoother and more precise maneuvering of the boat, enhancing overall handling and navigation, facilitating maneuvers in tight areas.

Lateral Docking is a software feature of the BlueSpin system that allows the boat to move along its transversal axis.



## BlueSpin main features



#### Powered by RIM DRIVE TECHNOLOGY

## **Rim Drive Motor**

This efficient permanent magnet hubless motor offers high thrust at low speed giving intuitive control and high reactivity.

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## Retractable

Allows you to switch easily from combustion to electric mode with a simple push of a button. Retract your BlueSpin turbine with no drag impact when navigating in combustion mode.



## 360° Propulsion

BlueSpin motors offer exceptional maneuverability, allowing vessels to move in any direction with precision and to spin the boat at 360° without displacement. Their flexible control system enhances the use of software functionalities, optimizing both performance and ease of operation.

## Whale Design

Our blades, specific to RDT motors©, are designed to optimize energy consumption and improve propulsion performances.



## Command panel

Easily navigate your boat thanks to our command panel which provides 1 joystick for direction, throttle levers for propulsion, 4 buttons for on/off - up/down, docking and 1 motor cut-off switch.



## Charging via Standard plug (230V)

Any available dock plug will charge your batteries. Moreover, BlueNav systems run on 48V, guaranteeing user safety.

## Whale Design, enhanced performance

BlueNav's Whale Design embodies the sophistication of nature's influence. Inspired by the graceful dynamics of whales, our hydrodynamics engineers have crafted a harmonious blend of biomimicry and sustainable innovation.

By integrating the bump design of cetacean flippers, our engineers have enhanced operability, resulting in improved thrust at low speeds without compromising topspeed performance.



## Our product range

Choose single or twin motors setup, fitting most kind of boats allowing full electric or hybrid configuration.



Heiaht Width Depth Weight

435 mm 363 mm 514 mm

Heiaht 565 mm Width 465 mm Depth 448 mm

55 kg

Inhull 15kW BlueSpin Inhull 15kW is an add-on retractable electric motor for installation through a well in the hull of a boat.

## Stationary 15kW

BlueSpin Stationary 15kW is a non-retractable electric motor designed to be integrated under the hull of a boat.

#### Outboard 8kW

BlueSpin Outboard 8kW is an add-on retractable electric motor designed to integrate to the transom of a boat. It allows for easy installation on both the transom and the waterline of the boat.

#### Outboard 15kW

BlueSpin Outboard 15kW is an add-on retractable electric motor designed to integrate to the transom of a boat. It allows for easy installation on both the transom and the waterline of the boat.

## Included in pack

We design and supply additional accessories for BlueSpin motors to simplify motor integration and improve the customer experience.

Example for a BlueSpin 15kW Outboard standard twin setup



#### BlueSpin Electric Motors

Twin-motor setup featuring a high-efficiency permanent magnet and a retractable motor.



#### **Command Panel**

The command panel provides 1 joystick for direction, throttle levers for propulsion, 4 buttons for on/off - up/down, docking and 1 killswitch.



#### **Embedded Software**

The BlueNav HMI user interface is compatible with most MFDs on the market, offering easy access to software options (MFD not included).



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#### 15kW Power Unit

An aluminium cast case including: the drive of the RIM Drive propeller and its air cooling systems, a PCB (Printed Circuit Board), the drives of the translation stepper motors, the power contactor and all the control and power connections.

#### **Communication and Control Unit**

Our communication and control unit box enables connection between the various components of the BlueSpin system, as well as to a 4G network, an Ethernet network to the EMF and the NMEA 2000 network on board.





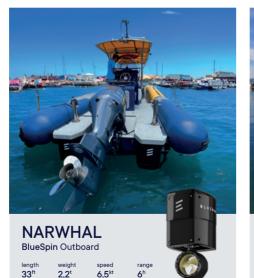
## **Connection Cables**

Main cables for system connection including fast connectors.

## They've gone hybrid

Our clients take pride in using our solution. To date, we have equipped various types of boats, including power catamarans, RIBs, dayboats, cabin boats, Pro work boats, and houseboats.











BlueSpin Outboard



## Hybrid use case

#### **Boat identity**

Customer Batopei

Location

Reunion Island

Activity Whalewatching

#### Mission

To be thoughtfully respectful of marine animals during tours by reducing noise, vibrations and pollution.

#### Hardware setup

**Total battery installed energy** 28 kWh

Motor installed power 2x15kW

#### Use and performance metrics

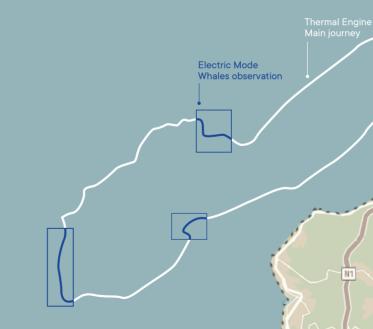
Number of daily outings 4 x 2 hours

Energy consumption breakdown 40% electric and 60% combustion

**Energy consumption per outing** Between 12% and 20% of the total battery range

## « The electric mode offers maneuverability in complete silence, allowing us to observe marine mammals without disrupting their natural activities. »

Josias Batopei boat owner



#### WHY OUR SYSTEM IS AN EXCELLENT FIT

- Hybrid Navigation: Seamless mode switch between electric and combustion mode in less than 20 seconds.
- Energy Efficiency: Low energy consumption in electric mode.
- Environmental Protection: Reduced emissions, promoting a cleaner environment and greater respect of the animals.

La Possession

Saint-Paul



## Embark with us today!

## Contact

## BlueNav

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