

GARMIN®



EmpirBus™
A Garmin Brand

EMPOWERING
ELECTRICAL SYSTEMS

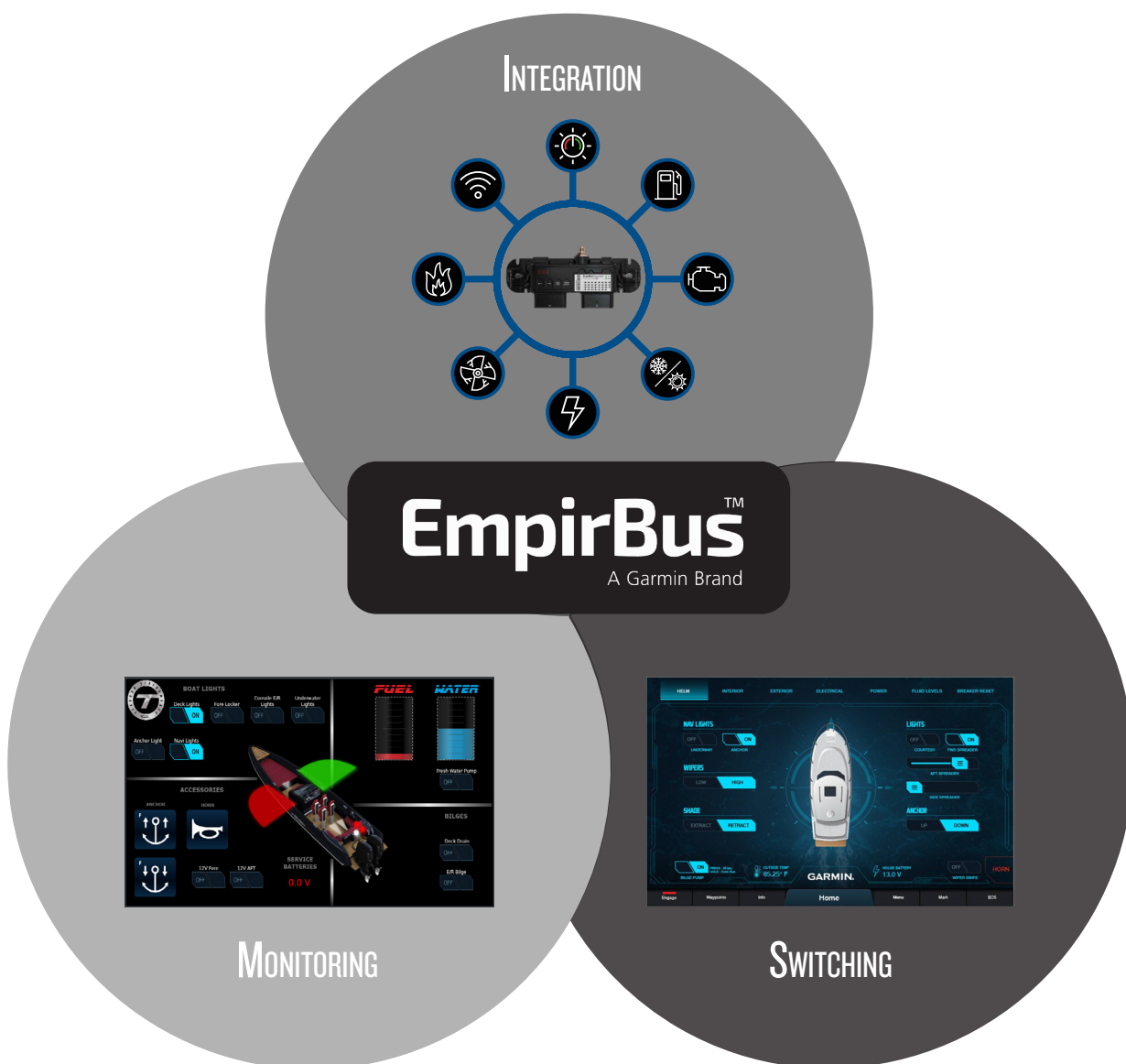
WHY EMPIRBUS ?

EmpirBus is a generic electrical distribution system, suitable for different fields of application, with almost endless possibilities of integration. Founded in 2003, EmpirBus have great experience of demanding installations in various environments such as boating, transport and industrial/recreational vehicles. With more than 50,000 installations in operation worldwide, we demonstrate every day the robustness, the reliability and the versatility of our technology.

To meet the growing demand for on board comfort, today's boats are carrying more and more technical equipment. This inevitably has impact on the size and complexity of electrical networks, making panels and helm stations ever more cumbersome and complicated.

The EmpirBus solution responds to these new issues and simplifies the design, installation, general use and the maintenance of the on-board electrical system. Electrical panels and fuses make way to compact modules that can be distributed across the electrical system and be placed close to the loads to reduce wiring, save weight and eliminated long bulky harnesses.

With EmpirBus, complexity is forgotten.



SIMPLER, MORE FLEXIBLE, MORE EFFICIENT

EmpirBus brings extra design to the vessel's interior by making electrical control panels with rows of buttons disappear from the console.

Directly from the navigation screens, dedicated displays or even a simple smartphone, the user controls all the on-board equipment - Lighting, air conditioning, navigation lights, energy, tanks, temperatures and much more. On board everything becomes simple and intuitive thanks to a graphic interface personalised in the colors of the boatyard.

A PROVEN DESIGN

AUTOMATE, MONITOR, PREVENT



Set free your imagination and create your own scenario and logic. The EmpirBus solution allows for example:

- Creating automation and scenarios
- Monitoring energy consumption
- Notification when maintenance is necessary
- Displaying alarms
- Prevent abnormal use of equipment (motors, batteries etc.)
- Recording of events

SYSTEM RELIABILITY AND REDUNDANCY



An EmpirBus installation is completely independent from the multifunction display. System startup is automatic as soon as the battery switches are on.

The user can intervene on several levels via:

- Garmin multifunction display(s)
- A programmable keyboard
- A smartphone, tablet or computer
- Or directly from EmpirBus modules

MULTILINGUAL INTERFACE



A traditional electrical panel, is by nature locked in a language that requires the use of symbolism which is not always easy to interpret.

The EmpirBus solution is designed to work in several languages and automatically adapts to the default language of the navigation system. It is ideal for rental or export sales.

CIRCUIT BREAKERS



EmpirBus modules replaces circuit breakers and protect the equipment connected to them. The user can enable the integrated circuit breakers from your navigation screen.

In the event of an anomaly, the user is immediately informed of the failure encountered and the time-stamped information is recorded within the Garmin event log.

BUILT TO LAST



All EmpirBus products are designed to withstand the harsh conditions of the marine environment. Robust and waterproof to the IP65 standard, the EmpirBus modules are also shock and vibration resistant.

MOLEX® industrial connectors provide optimal contact, while NMEA 2000 compatibility ensures perfect integration with on-board electronics.

ON BOARD WARRANTY AND GARMIN SERVICE



By choosing the Garmin EmpirBus solution for your boats, your customers will benefit from a quality and worldwide after-sales service whatever their destination.

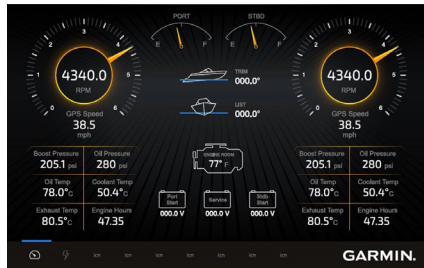
If necessary, our approved installers can also work on board for the duration of the warranty.

MONITORING, SWITCHING AND AUTOMATISATION

MONITORING

Thanks to the "Monitoring" function, the skipper can see the status of all technical equipment on board at a glance. EmpirBus is compatible with many sensors, whether analog or digital, and has partnerships with market leading HVAC, interceptors, gyro stabilizers and power management manufacturers.

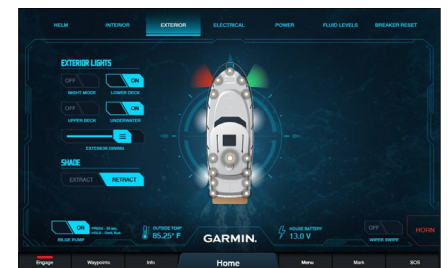
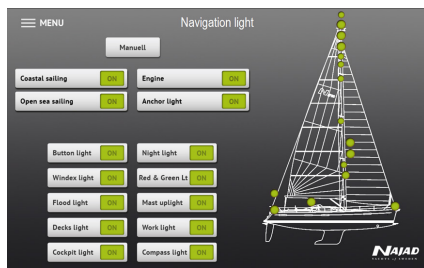
- Tanks
- Temperatures, pressures
- Fire, intrusion sensors
- DC / AC converter
- Battery charger
- Energy balance, maintenance



DIGITAL SWITCHING

EmpirBus is a new generation of electrical distribution system, replacing standard mechanical circuit breakers and switches with a state-of-the-art digital power distribution. Simple, easy to use, cost-effective and with seamless, reliable operation, EmpirBus digital switching makes a perfect solution to centralize all controls. The modules can be distributed in different places of the boat in order to reduce the length of the harnesses and free up the space usually dedicated to the conventional electrical panel.

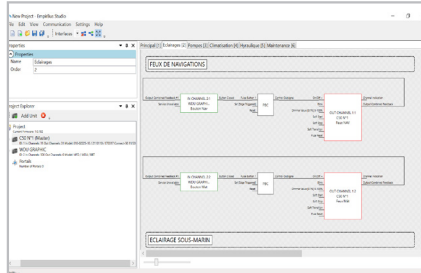
- ON/OFF/AUTO
- Lighting
- LED dimmer
- Hydraulic
- Windlass control
- Reversible motor
- CAN, NMEA2000
- EnOcean¹ standard wireless switch



AUTOMATISATION

EmpirBus offers the possibility of improving safety and comfort on board through the creation of automated systems. Whether it's lighting scenarios, displaying pop-up alerts, or creating automated modes, the only limit to EmpirBus is your imagination.

- Examples :
- Night / Marina / Romantic dinner lighting mode
- Timed total shutdown
- Blocking of the windlass control as soon as the boat speed exceeds 3 knots
- Alert if the shore plug is connected when the engines start
- Prevent the engines from starting if the hydraulic platform is lowered

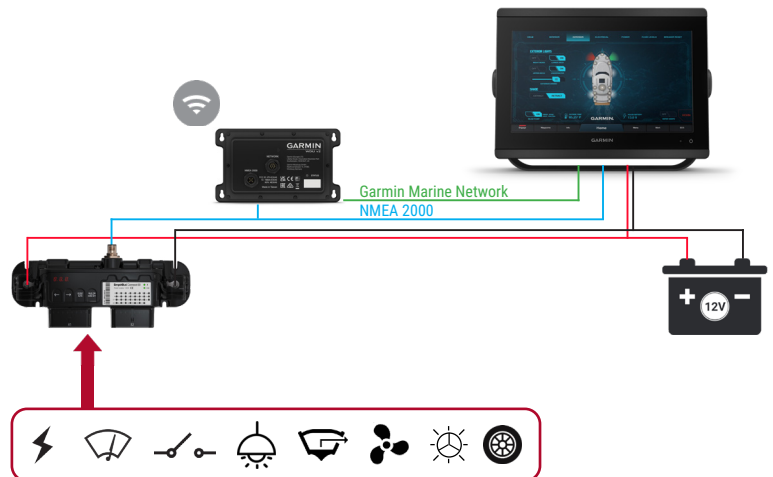


EMPIRBUS INSTALLATION EXAMPLES

UP TO 10 METERS



© WettonCraft

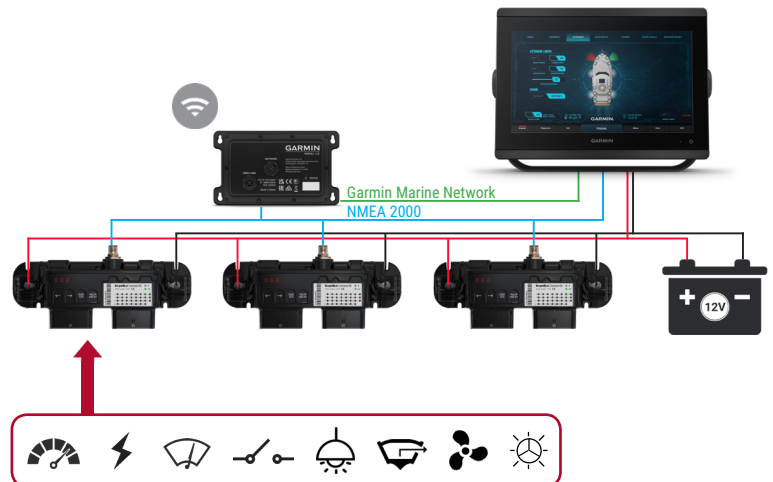


20 Outputs 10A, 11 Inputs : Digital, Analog, Multi-switches (6/Input), NMEA 2000

UP TO 15 METERS

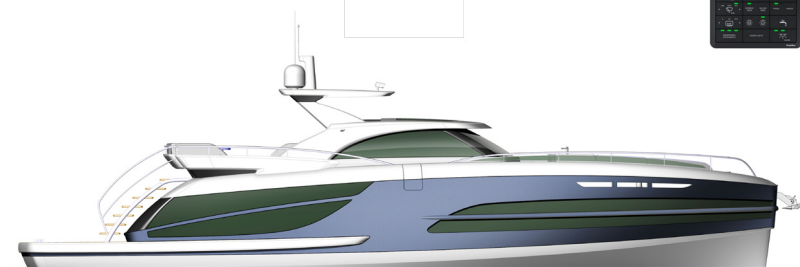


© Aventara Catamaran (STGI)

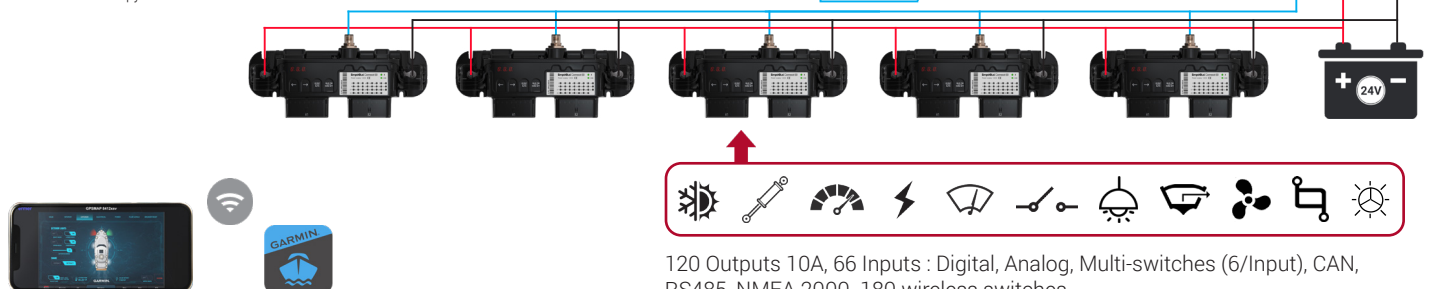


60 Outputs 10A, 33 Inputs : Digital, Analog, Multi-switches (6/Input), CAN, RS485, NMEA 2000. 90 wireless switches

MORE THAN 15 METERS



© Van Der Valk Shipyard



120 Outputs 10A, 66 Inputs : Digital, Analog, Multi-switches (6/Input), CAN, RS485, NMEA 2000. 180 wireless switches

THE CUSTOMIZED SOLUTION

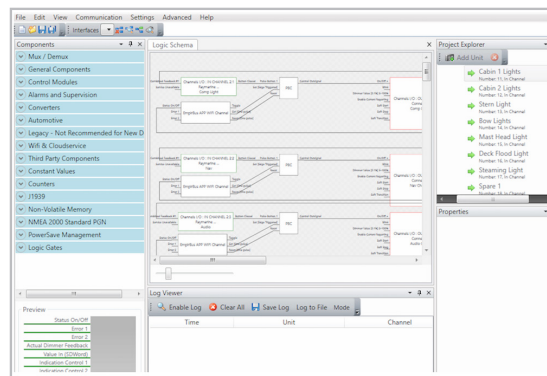
The Empirbus solution is universal and based on a set of modules which can be customised according to your needs. It offers total flexibility as well as development and commissioning times reduced to the absolute minimum. A unique and common firmware gives you the assurance of a sustainable and evolving system, while keeping control of your development budgets.

To carry out your projects, Garmin puts at your disposal all the tools necessary to be autonomous. And thanks to the Cloud, you can share your projects with Garmin EmpirBus development teams and benefit from specialised technical assistance.

EMPIRBUS LogiX - POWER AND FLEXIBILITY

The EmpirBus LogiX software allows you to configure each of the EmpirBus modules. It is a powerful graphic programming tool that defines all the features and characteristics of your installation:

- Configuration of EmpirBus modules
- Declaration of each module of your installation
- Definition of the properties of each channel
- Creation of automatisms

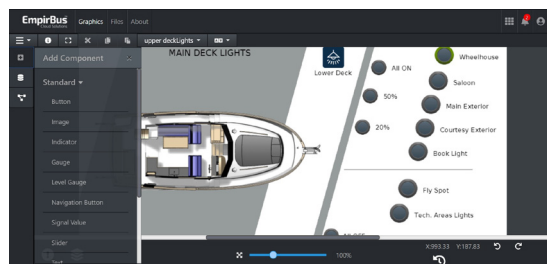


EMPIRBUS GraphiX - UNLIMITED CREATIVITY

EmpirBus GraphiX is the software that allows you to transpose the EmpirBus logic into a modern and intuitive graphic interface.

This software provides all the functionality you need for the design of Monitoring and / or Digital Switching pages with almost endless possibilities:

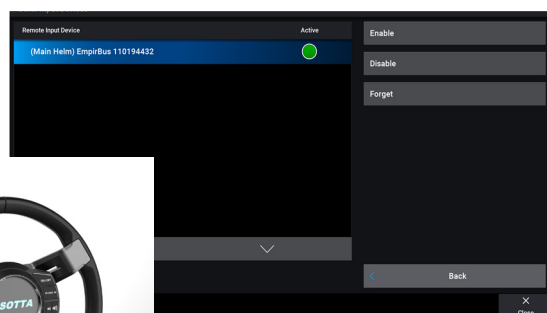
- Create your personalised graphical interface construction / boat colors
- Respect your graphic charter (colour codes, typography, layout, naming)
- Use your own icons, symbols, illustrations...
- Choose the menu organisation according to your preferences / needs.
- And offer a personalised mobile application in the colours of your site, can be used immediately and at no additional cost from a mobile device (smartphone / tablet).



3RD PARTY MFD INPUT SUPPORT

This feature allows 3rd party inputs, keypads, steering wheels, and button keypads to be programmed as remote input devices for GPSMAP chartplotters.

The input device can be programmed to a variety of functions including favorites keys, function-specific keys, media controls and complete display navigation. The EmpirBus connect 50 is required to complete this integration.



EMPIRBUS COMPONENTS

CONNECT 50



COMPATIBLE
12/24V

IP65

NMEA
2000

- 10A Max per output / Max Total Load : 50A
- Circuit breaker for each channel
- Up to 11 inputs and 20 outputs¹
- 1x Bus CAN, 1x Bus RS485, 1x Bus LIN Bus
- 1x EnOcean radio receiver (30 switches)²
- Multi-Switch (up to 6 switches/input)
- Dimensions : 230 x 106 x 38 mm

CONNECT HPR



NMEA
2000

IP65

- Outputs 10 x 18A Max per output, could be configured to 5 pair H-bridge
- Outputs 2 x 5A Max per output
- Circuit breaker for each channel
- Max Total Load : 50A
- 4 inputs
- 12V
- Dimensions : 230 x 106 x 38 mm

DCM



COMPATIBLE
12/24V

IP65

NMEA
2000

- 18A Max per output / Max Total Load : 100A
- Circuit breaker for each channel
- 16 user configurable bidirectional (I/O) channels
- 1x EnOcean radio receiver (30 switches)²
- Multi-Switch (up to 6 switches/input)
- Dimensions : 230 x 106 x 38 mm

WDU V2



COMPATIBLE
12/24V

IP65

NMEA
2000

- Delivers graphic content to Garmin/Volvo MFD's as well as for Smartphones (WiFi)
- Ethernet & WiFi
- Dimensions : 155 x 92 x 46 mm

MCU V2



COMPATIBLE
12/24V

IP65

NMEA
2000

- PC Interface, USB port
- 2 x CAN
- 2 x RS485
- 1 Digital IN
- 2 Digital OUT

SP8 AND SP12



- Switch panels with customizable button icons and text
- 3 Integrated LED per button / Backlighting
- Available in portrait or landscape orientation

SCREENS



- Garmin & Volvo Penta MFDs from 7" to 24"
- TD50 : 5,2" Touch screen display
- Full screen or combo page

¹ Depending on version.

² EnOcean is a trademark of EnOcean Alliance Inc.

GARMIN.COM

©2023 Garmin Ltd. or its subsidiaries. All rights reserved.

Please note that Garmin Ltd. or its subsidiaries reserves the right to modify the information in this catalogue as it sees fit without prior notice.



Atlantis Marine Power Limited
www.atlantismarine.com
sales@atlantismarine.com
+44 (0)1752 208810