



Features and key points

The ShipBS module supervises a fleet of 12 or 24V batteries within a ShipHeart™ system.

Installed on the negative terminal of the battery bank, it is connected in a matter of seconds and requires no configuration to be recognized by the ShipBase module to which it is connected. Its position on the bus distinguishes it from other modules, and the termination resistors are automatically adjusted according to this new configuration.



On the battery side, its integrated braid allows it to be mounted in the tightest spaces, while avoiding the transmission of mechanical stress to the measurement shunt. The "0V" output is connected to an M8 stainless steel bolt, the length of which can be adapted to specific requirements.



The ShipBS module continuously measures the differential current of the battery bank: positive when charging, negative when discharging.

A measuring cable is supplied with each ShipBS. Fully pre-wired, it is connected to the module by a plug-in connector for easy installation. Its M8 terminal is simply mounted on the positive terminal to measure the voltage directly at the battery terminals, as well as its internal temperature.



This information can then be processed by ShipBase, which also has access to the precise consumption of the equipment powered by this battery bank. **This processing, partly patented by Koriolan, provides detailed information on the state of the battery pack:** power consumption, autonomy, charging and discharging current at any given moment, as well as the energy consumed per circuit over an hour, a day, a week or a month. At last, a simple, usable view of your on-board consumption!

Specifications

Batteries

Voltage	9 - 32 V DC
Current	± 380 A continuous ± 1,900 A for 5 s

Measures

Battery voltage	9 - 32 V DC	± 0.5%
Differential current	0 - 1 A	± 10%
	1 A - 50 A	± 2%
	50 A - 380 A	± 5%
Module temperature	-10°C - +70°C	± 0.1°C

Battery connection

Terminal - batteries	M8 terminal on 140mm braid
Terminal + batteries	M8 terminal on 1m cable
0V distribution	On M8 x 25mm stainless steel bolt

Consumption

On + battery	1mW max (30µA @32V)
On K-Bus - normal mode	5mA
On K-Bus - standby mode	800µA

Information LED

Double blue flash (4s)	Optimum operation
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Red flashing (1s)	No sensor + battery
8 white flashes (1s)	Location from ShipBase
Alternating red/green (1s)	In and Out cable inversion

K-Bus extension bus

Number of ShipBS	12 max
Connections	2 RJ45 connectors (In and Out)
Termination resistors	Fully automatic

Environment

Operating temperature	-10°C to +70°C
Protection class	IP20

Mechanical engineering

Mechanical mass	Isolated
Weight	455g ± 20g
Overall dimensions	116*mm x 89mm x 35mm (*) ≈ 265mm with braid
Mounting center distance	94mm x 79mm
Fastening screws	4 x 3.5/4mm

Interfaces

