



**TRANSFLUID**<sup>®</sup>  
industrial & marine

# BATTERY PACK

Innovative energy system  
for marine applications



**drive with us**

# Transfluid's battery

Transfluid's battery is the next-generation accumulator for marine and industrial applications.

It is based on lithium iron phosphate cells (LiFePO<sub>4</sub>), a technology that is safe and has the best performance/cost ratio, with integrated BMS to maintain the cells always equalized and efficient.

Transfluid's battery gives great usage flexibility and **reduces the total ownership costs**, thanks to its 4000 cycles lifespan, being maintenance-free and allowing opportunity fast charging to increase the daily available energy.

The absence of emissions and the extended operating temperature range make Transfluid's battery perfectly suited for every workplace.

It is available in various sizes and capacities, and it has been **equipped with special features** for the best integration with Transfluid transmission system.

*Our battery System successfully passed all the DNV-GL tests including the new 2018 forced thermal runaway and this makes it compliant with Norwegian Maritime Authority (NMA) Propagation Test 1*



**CERTIFICATE N°: TAE00003SJ**



\* data are subject to alteration without notice

## Interfacing

Transfluid's battery can work as a standalone accumulator, or it can interface through CAN-bus or Ethernet to other electronic devices such as MPCB, display, PLC, in order to show the data of the battery on a dashboard, or to implement an advanced management of the available energy.

### Suited for every application

Having no gas emissions, these batteries are suited also for marine and many industrial applications.

## Battery LiFePO<sub>4</sub>

It's based on lithium iron phosphate cells (LiFePO<sub>4</sub>), a technology that is safe and has the best performance/cost ratio, with integrated BMS to maintain the cells always equalized and efficient. Box is stainless steel IP65.

### Long lifespan

- More than 4000 cycles

The lifespan is 3 times longer than traditional batteries, making the cost per cycle lower than any other technology. Thanks to their high efficiency, up to +25% than lead batteries, energy costs and CO<sub>2</sub> emissions are reduced.

### Rapid charge, whenever you want

- +50% charge level in only 30 minutes
- Complete charge in 2 hours
- Accepts partial charge and discharge
- No memory effect

### Charger and discharger

- Continuous charging (A) 0.8 C
- Pulse charging (A) SOC < 80% 1.2 C
- Continuous Discharging (A) 1 C
- Pulse Discharging (A) 2C

### Maintenance-free/ Remote control system

Every Transfluid battery has an integrated remote monitor system that permits to download a daily log of all the internal parameters. This control reports precise health status of every battery pack of the fleet. Transfluid batteries are maintenance-free allowing service on-site through the integrated diagnosis system.

### Wide Temperature Range

Transfluid battery are certified for working in an operating temperature range between -20°C to +60°C that means that the batteries can be installed in ambient temperature from -30°C to +45°C, for the most severe conditions automatic heater keeps the battery in max efficiency condition.

### No emissions

No gas emissions during charge and discharge, so no special charging rooms are required. They may be charged at any place with maximum safety.

## GENERAL SPECIFICATIONS

Capacity Ah	Contin. discharge A	Pulse discharger A	Continuous charge A	Pulse charge A	Operating Temperature °C	Box Material	Protection class
100	100	200	80	120	-20 / 60	SS316L	IP65 (No cooling required)
200	200	400	160	240			
300	300	600	240	360			
400	400	800	320	480			
600	600	1200	480	720			
800	800	1600	640	960			

### 48V

Energy kWh	Architecture	Dimension Single Box **	Number Of Modules	Total Weight
10.3	Single Module	620x677 h352 mm	1	130 kg
20.5	2P	620x677 h352 mm	2 + MCR*	260 kg
30.8	3P	620x677 h352 mm	3 + MCR*	390 kg
41.0	4P	620x677 h352 mm	4 + MCR*	520 kg



### 96V

Energy kWh	Architecture	Dimension Single Box **	Number Of Modules	Total Weight
9.6	Single Element	506x876 h293 mm	1	130 kg
19.2	Single Element	619x955 h352 mm	1	230 kg
28.8	3P	506x876 h293 mm	3 + MCR*	390 kg
38.4	2P	619x955 h352 mm	2 + MCR*	460 kg
57.6	3P	619x955 h352 mm	3 + MCR*	690 kg
76.8	4P	619x955 h352 mm	4 + MCR*	920 kg

### 144V

Energy kWh	Architecture	Dimension Single Box **	Number Of Modules	Total Weight
30.8	3S	620x677 h352 mm	3	390 kg
61.4	3S - 2P	620x677 h352 mm	6 + MCR*	780 kg
92.2	3S - 3P	620x677 h352 mm	9 + MCR*	1170 kg
122.9	3S - 4P	620x677 h352 mm	12 + MCR*	1560 kg

### 288V

Energy kWh	Architecture	Dimension Single Box**	Number Of Modules	Total Weight
28.8	3S	506x876 h293 mm	3	390 kg
57.6	3S	619x955 h352 mm	3	690 kg
86.4	3S - 3P	506x876 h293 mm	9 + MCR*	1170 kg
115.2	3S - 2P	619x955 h352 mm	6 + MCR*	1380 kg
172.8	3S - 3P	619x955 h352 mm	9 + MCR*	2070 kg
230.4	3S - 4P	619x955 h352 mm	12 + MCR*	2760 kg



### 384V

Energy kWh	Architecture	Dimension Single Box**	Number Of Modules	Total Weight
38.4	4S	506x876 h293 mm	4	520 kg
76.8	4S	619x955 h352 mm	4	920 kg
115.2	4S - 3P	506x876 h293 mm	12 + MCR*	1560 kg
153.6	4S - 2P	619x955 h352 mm	8 + MCR*	1840 kg
230.4	4S - 3P	619x955 h352 mm	12 + MCR*	2760 kg
307.2	4S - 4P	619x955 h352 mm	16 + MCR*	3680 kg

\* MCR dimensions: 300x350xh160 mm, weight: 10,7 kg

\* Collectro box: 315x410xh155 mm, weight: 8 kg

\*\* Indicative dimensions. Ask for official drawing





(Examples of different applications of Transfluid's batteries technology)

# TRANSFLUID<sup>®</sup>

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