



kaitek

power solutions



K-LITHIUM
battery pack

Innovative energy system
for marine, industrial applications and
TRANSFLUID Hybrid & Electric Systems

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battery pack

k-LITHIUM is the next-generation battery for marine and industrial applications.

It is based on lithium iron phosphate cells (LiFePO₄), a technology that is safe and has the best performance/cost ratio, and integrates Kaitek's balancing system (BBS) to maintain the cells always equalized and efficient.

k-LITHIUM gives great usage flexibility and **reduces the total ownership costs**, thanks to its 3000 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 k-LITHIUM 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.

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

Long lifespan

- More than 3000 cycles

The lifespan is 3 times longer than traditional batteries, making the cost per cycle lower.

Maintenance-free

Planned service is avoided, having no need of topping up or periodical checks. The conditions of the battery can be easily verified thanks to integrated diagnosis systems.

Suited for every application

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

Energy saving

Thanks to their high efficiency, up to +25% than lead batteries, energy costs and CO₂ emissions are reduced.

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.



Active and passive safety systems

k-LITHIUM batteries guarantee the maximum safety, in fact they integrate all the necessary protection systems for the safety of the users, of the machine and of the battery itself. They are equipped with several sensors to monitor the voltage and the temperature of every single cell, indicating and preventing potentially dangerous operating conditions such as overdischarge, overcharge, extreme temperatures. The output terminals are disconnected when the system is off or in case of failure, preventing the risk of accidental short circuits. Internal fuses protect the battery and the machine in case of failure during operation.

Interfacing

k-LITHIUM can work as a standalone battery, or it can interface through CAN-bus to other electronic devices of the machine (PLC, controller, display, ...), in order to display the data of the battery on a dashboard, or to implement an advanced management of the available energy.

Standard models

Type	96V 66Ah	96V 100Ah	96V 200Ah	96V 300Ah	96V 400Ah
Energy (kWh)	6,3	9,6	19,2	28,8	38,4
Capacity Ah	66	100	200	300	400
Voltage	96V Nominal - 115,5V Max - 82,5V Min				
Continuous Charging (A)	33	50	100	150	200
Pulse Charging (A) SOC < 80%	66	100	200	300	400
Continuous Discharging (A)	66	100	200	300	400
Pulse Discharging (A)	132	200	400	600	800
Operating Temperature	0 to 60°C / -20 to +60 with heating pack*				
Weight (Kg)	90	120	215	310	400
Box	Inox Steel				
Protection Class	IP66				

Type	288V 66Ah	288V 100Ah	288V 200Ah	288V 300Ah	288V 400Ah
Energy (kWh)	19	28,8	57,6	86,4	115,2
Capacity Ah	66	100	200	300	400
Voltage	288V Nominal - 346,5V Max - 243V Min				
Continuous Charging (A)	33	50	100	150	200
Pulse Charging (A) SOC < 80%	66	100	200	300	400
Continuous Discharging (A)	66	100	200	300	400
Pulse Discharging (A)	132	200	400	600	800
Operating Temperature	0 to 60°C / -20 to +60 with heating pack*				
Weight (Kg)	285	340	600	900	1200
Box	Inox Steel				
Protection Class	IP66				



(Examples of different applications of k-LITHIUM batteries tecnology)

