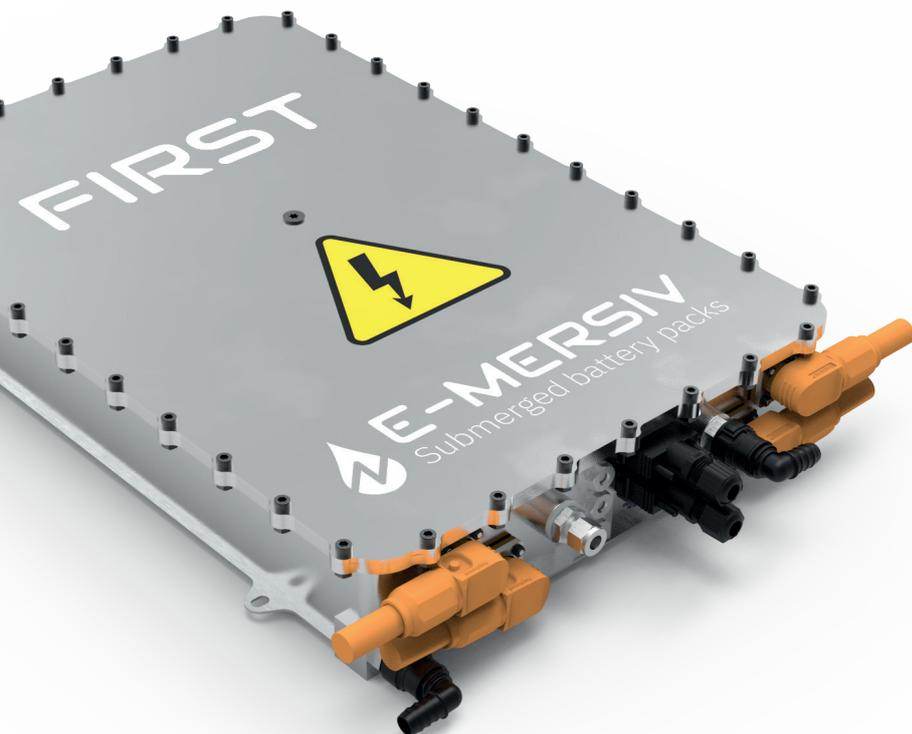


FIRST

Powerful and high-performance battery

 **E-MERSIV**
Submerged battery packs



Immersion Cooling Technology

e-Battery Thermal Management System

FIRST, the High Performance Battery

10C

Accelerating

10C

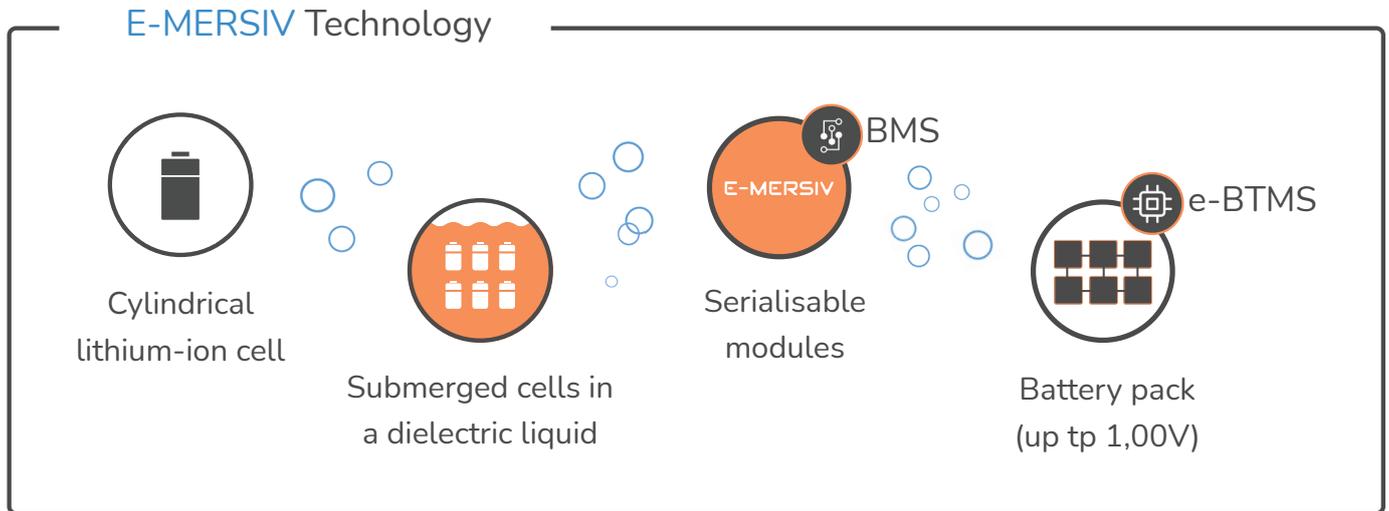
Regenerative braking

7C

Continuously

The picture of the car is made by zlatko_plamenov / Freepik. These information are not contractual. E-MERSIV can adapt this battery to your needs. More information on: www.e-mersiv.com

From a single cell to a **complete battery pack**, E-MERSIV masters all the steps of the chain to develop and offer an **innovative battery cooling system**.



Focus on the cooling loop

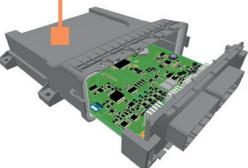
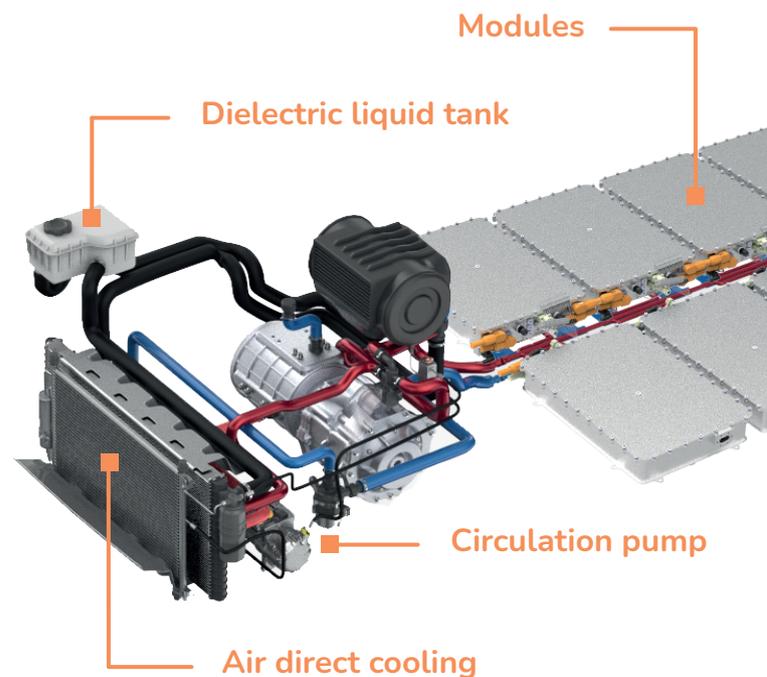
Example of flat chassis battery pack on a EV car.

With E-MERSIV, modules can be adapted to any shape and any type of vehicles.

e-BTMS
Battery Thermal Management System

Advanced algorithms to reach the **best ratio safety-performance**.

- Data logging & transfer
- Wireless communication
- Cooling fluid regulation

Option: integrate a secondary dual loop with a pump and a radiator inside of the modules.

MODULE

The values below correspond to a single module

Physical Specifications

Value

Available Energy @1c	5.2 kWh
Nominal voltage	65V (NMC 18s)
Nominal capacity	80 Ah
Continuous / Peak (10s) power in Discharge	52 / 52 kW
Continuous / Peak (10s) power in Charge	8 / 52 kW
Gravimetric energy density (dry)	137 Wh / kg
Volumetric energy density	192 Wh / L
Cooling / Dielectric coolant	< 60°C
Communication	Canbus

The module is serialisable → Up to 1,000 V

Dimensions

Value

Height	100 mm
Width	630 mm
Depth	430 mm
Volume	27.1 L
Weight (dry)	34 kg
Weight (wet)	38 kg

These information and photos are not contractual.

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PACK 800 V

The values below correspond to an example of 10 modules

Physical Specifications	Value
Available Energy @1c	5.2 kWh
Nominal voltage	648 V
Discharge power	518 kW
Regenerative braking power	518 kW
Charge power	78 kW
Cooling loop weight (wet)	50 kg
Total battery weight*	430 kg

*including wet cooling loop and flat floor chassis



**AMBIANT
TEMPERATURE**

Provide the best temperature homogeneity between the cells to improve the performance and capacity of the battery.



**INCREASED
SAFETY**

No thermal runaway propagation. Tested with simultaneous thermal runaway of two adjacent cells.



**LONGER
LIFETIME**

Improve cell lifetime by up to 30% for a sustainable battery that meets the needs of the market and new ecological challenges.



**HIGHER
PERFORMANCE**

Increase the battery capacities and performance up to 10C accelerating, 10C regenerative braking, and 7C continuously.

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FIRST

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Submerged battery packs

Thanks to a **20 years experience** in Li-ion Batteries, Battery Management System and Thermal Management, **E-MERSIV** can meet **all your needs** and support **all your projects**:

Simulation

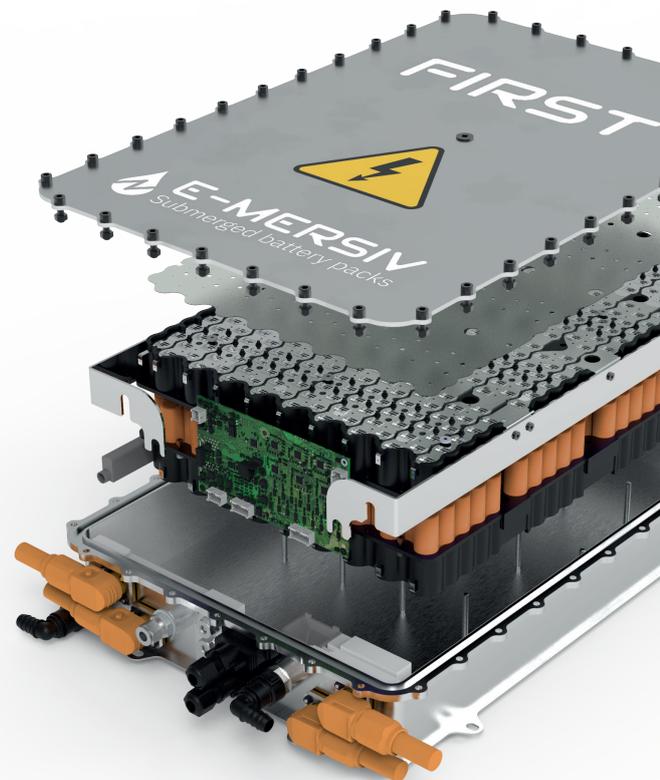
Design

Tests

Production

Certifications

Whatever is your market, **E-MERSIV** helps you to **meet standards** and can accompany your efforts to obtain the **right approvals** and **certifications**.



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E-MERSIV

Submerged battery packs

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