

# Alesso 48PLR



## High performance battery

48 V / 88 Ah / 3.65 kWh\*

### Alesso Battery System

The Alesso 48PLR battery module allows the design of individual battery storage solutions with high safety standards and is ideally suited for use in applications with strongly fluctuating power factors.

Together with the specially developed cooling technology, high discharge rates can be realized with comparatively small installation space and long life cycle.

Alesso 48PLR is predestined for stationary (on-grid/off-grid) and larger mobile applications in the areas of peak shaving management, emergency power supply and short/mid-term energy storage.

### Flexible. Powerful. Reliable.

- Modular battery storage solution for stationary and larger mobile applications
- Easy handling based on standard 19" format
- Highly effective battery cell cooling technology for high charge/discharge rates and long battery life
- Integrated battery management system to monitor cell current, voltage and temperature as well as safety mechanisms
- Reliable cell connection using laser welding technology with over 30 years of laser welding experience

\*at 100% DOD in the reference cycle

fischer Power Solutions is a manufacturer of high-performance lithium-ion battery systems for on- and off-grid applications with the highest requirements. Founded in 2019, it is a subsidiary of the over 50-year-old fischer group, which produces stainless steel tubes and components for the automotive industry with over 2800 employees at 10 locations worldwide.

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**Powerful charging and discharging**

Alesso offers a charge rate of 1 C and a discharge rate of 4 C continuously.



**Easy to scale**

Series connection allows systems up to 16 battery modules together with the Alesso master BMS.



**Highly effective liquid cooling**

The use of innovative technologies enables highly effective liquid cooling/tempering of the battery cells, keeping them within their optimum temperature range at all times.



**Flexible integration**

Whether on-grid, e.g. for peak shaving, or off-grid, e.g. as energy storage for renewable energy systems – Alesso can be integrated into a wide range of infrastructures.



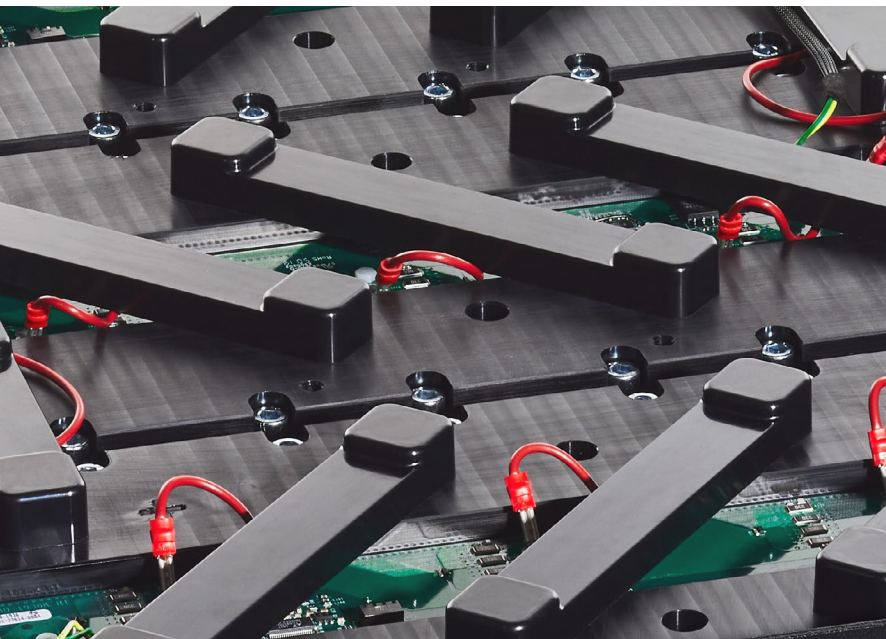
**Long life cycle**

Constant temperature control of the battery cells maximizes the life cycle, performance and safety of the battery system.



**Highest safety**

Through the integrated battery management system, critical system states can be identified and managed at an early stage.



**Alesso creates solutions**

With a master BMS module, a battery disconnect unit and suitable converter technology, Alesso battery modules can be integrated into a variety of different system landscapes. The communication and control of the system is managed centrally via the CAN bus communication interface of the master BMS.

The combination of a solar power system or fuel cell technology together with Alesso, for example, can create a self-sufficient power supply for rural applications. In electromobility, Alesso can be used as an energy storage for high-performance fast charging columns.

**Specifications**

Type	Alesso 48PLR
Cell configuration	NMC
Capacity	88Ah (1 C; 100% DOD)
Energy	3.65 kWh / 23°C (1 C)
Nominal voltage	43.2V DC
Voltage max.	50.4V DC
Voltage min.	30.0V DC
Regular charge current	46 - 88 A
Charge current max.	120 A

Continuous discharge current	320 A with liquid cooling
Safety	BMS incl. bipolar load disconnection and safety fuse
Communication	CAN-Bus 2.0 B
Weight	~ 43 kg (without liquid)
Dimensions (L x B x H)	803 mm x 483 mm x 133 mm (19" format)
Conformity	UN 38.3 ready; BattG