

RS 230			
11.8 kWh	51 Vdc	95 kg	900 Up to Vdc

RS 230

Lifting Points

Lifting points designed to make handling and lifting easier and safer.

Gas Exhaust

Gas exhaust including pressure relief.

Robust Enclosure

Steel high IP rated enclosure to protect the battery cells from moisture and mechanical abuse.

PPS

Patented propagation protection system.

LiFePO4 Technology

High performance and safe battery chemistry.

Power Connections

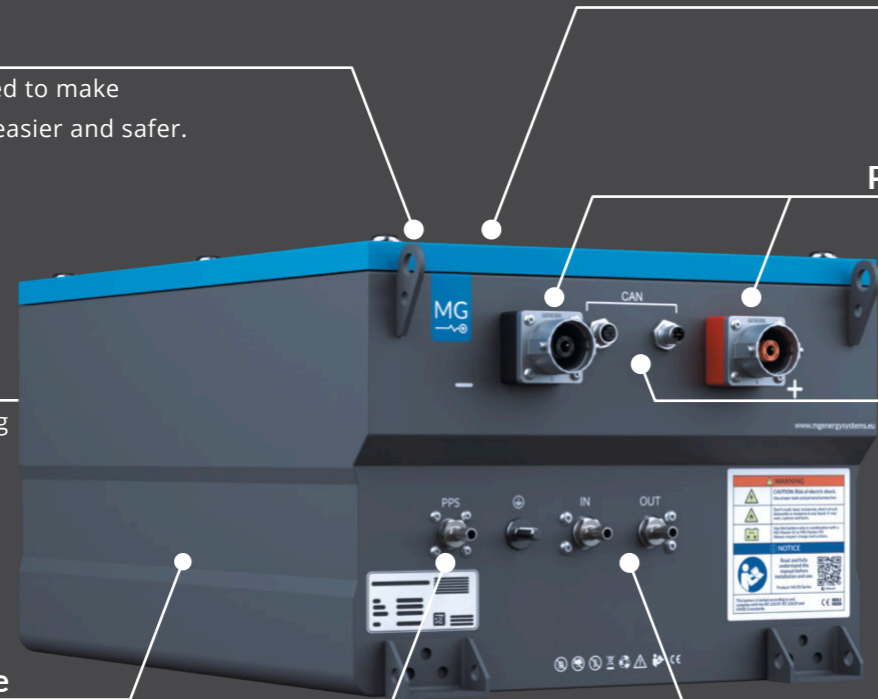
Including high voltage interlock loop.

CAN-Bus

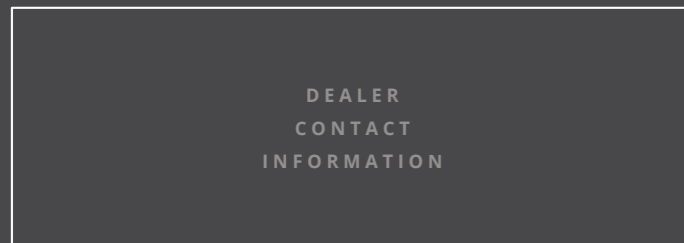
Data connection to MG Master BMS.

Liquid Cooling

Cooling connections to provide high performance and safety.



CONTACT :



MG Download Center



RS 230

The RS 230 lithium-ion battery offers high performance together with the highest safety standards. This LiFePO4 based battery module contains a professional liquid thermal management system and a unique patented cell level propagation protection system.

The combination of these safety and performance features make the RS battery suitable for large energy storage applications as well as smaller peak power packs. This makes the RS Series an extraordinary high performance battery module for hybrid or electric vehicles, vessels, industrial machinery and solar off-grid applications.

Thanks to the modular design, easily create 48 up to 900 Vdc systems to power all sorts of applications.

- ▶ 3rd generation LiFePO4 chemistry
- ▶ Liquid Thermal Management
- ▶ Cell Level Propagation Protection System
- ▶ Pressure Relief Valve with Gas Exhaust
- ▶ Steel IP65 Enclosure
- ▶ High Voltage Interlock Circuit
- ▶ Integrated BMS

HIGH PERFORMANCE BATTERY

Thermal management guarantees the high performance of the RS Series. The RS 230 battery module is equipped with a unique fluid based thermal management system. The integrated liquid cooling actively cools or heats all battery cells. This ensures that the battery cells are kept within a predefined temperature window.

The thermal management system maintains an equal temperature across the entire system. Managing the temperature results in an improved cycle life and overall performance.

THERMAL MANAGEMENT

- ▶ Consistent Battery Temperature
- ▶ Liquid Heating and Cooling
- ▶ Extended Cycle Life
- ▶ High Peak Charge and Discharge Currents

SYSTEM MODULARITY



>1 MWh
SYSTEM CAPACITY

Up to 900 Vdc
HIGH VOLTAGE SOLUTIONS

SAFETY ++

BATTERY MANAGEMENT SYSTEM

To ensure a high safety standard, each RS 230 battery module comes with an integrated Battery Management System. This is an intelligent electronic module called a slave BMS. This slave BMS measures all cell voltages and temperatures inside the battery module. It controls balancing on both cell and module level, which is unique in the market. The slave BMS in each battery module communicates with an MG Master BMS. Via a galvanic isolated CAN-Bus the MG Master collects and monitors the status of all battery modules. If the measured values from a battery module exceed the limit, the MG Master will automatically take action to protect all of the connected battery modules.

EXHAUST SYSTEM

A patented pressure relief exhaust connection is fitted in each RS battery. In case of a thermal runaway, the exhaust system automatically channels the released gasses to a safe area.

PROPAGATION PROTECTION SYSTEM

The battery enclosure includes a PPS connection. In case of a single cell thermal runaway event, this propagation protection system fills the battery with a fluid to remove the heat as quickly as possible. By doing so, this mechanism prevents other cells from overheating. This solution mitigates the risk of large uncontrolled battery fires.

