



DEHN protects.

AC coupled and scalable Li-Ion battery storage system "scalebloc" by HOPPECKE Batterien GmbH & Co.KG



Customer



HOPPECKE Batterien GmbH & Co.KG

Project overview

Branch

Energy, e-mobility and industry

Application

Li-Ion battery storage system

Hardware

DEHNshield FM

Blitzductor XT

DEHNpatch

DEHNgate

External lightning protection system

DEHN protects.

AC coupled and scalable Li-Ion battery storage system "scalebloc" by HOPPECKE Batterien GmbH & Co.KG



HOPPECKE Batterien GmbH & Co.KG

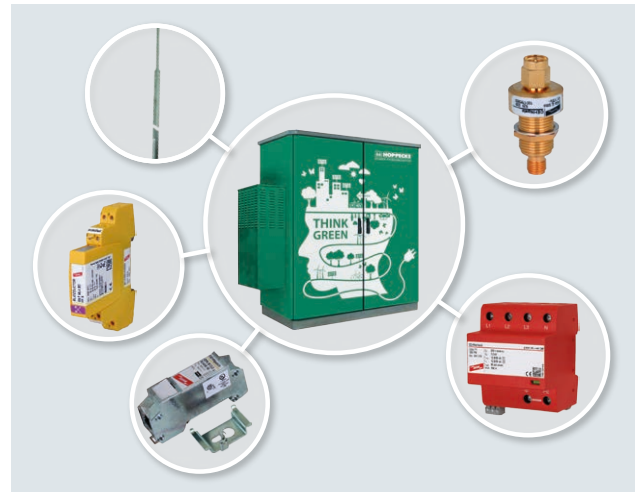
HOPPECKE Batterien GmbH & Co.KG is the largest producer of industry battery systems in European ownership. Since 1927, the family company has been developing and producing in Germany, and thanks to its leading research and development activities, has all reliable and innovative storage technologies in its product portfolio. With energy solutions designed for safety and availability, HOPPECKE Batterien GmbH & Co.KG serves various areas of application including the secured power supply (grid) and storage of renewable energies (sun). For the latter, they have developed the sun|systemizer scalebloc, an air-conditioned battery storage system with an energy capacity of 60 kWh and a maximum power output of 30 kW. Direct parallel connection makes the battery storage system scalable to up to 1 MWh and 500 kW.

Special features

The integrated inverter means that the scalebloc cannot only be connected to a three-phase alternating current grid but is also capable of forming an isolated network thanks to its black start (self-start) function. The intelligent energy management system is equipped with a GSM router and connected to a cloud enabling continuous optimisation by collecting and evaluating data from the scalebloc. This energy management system allows the scalebloc to be used in diverse applications. For example, the sun|systemizer scalebloc can be used to compensate fluctuations in production and load in industrial applications and avoid current peaks which might overload the grid and lead to higher costs. Intermediate storage and consumption of self-generated power, for example, from a photovoltaic system can significantly reduce costs. The battery storage system meets all current standards, including those pertaining to lightning and surge protection.

Challenge and solution

The constant availability and functionality of battery storage systems is a decisive economic factor. The risks presented by direct and indirect lightning discharge or network-induced surges are high. Repairing the resulting damage entails sizeable costs both for materials and personnel. That is why HOPPECKE Batterien GmbH & Co.KG put their trust in a high-quality lightning and surge protection con-



cept by DEHN which, at the same time, fulfils all international standards. An external lightning protection system is installed on the roof to prevent mechanical damage such as melting of the sheet metal exterior in case of a direct lightning strike. The metal exterior is used as a natural down-conductor to discharge the lightning current to the earthing system and acts as a Faraday cage. In order to ensure complete equipotential bonding, all power and data lines are protected by lightning current and surge arresters designed to protect even the most sensitive electronics. Maximum safety!

Benefits of the DEHN solution

- ➔ Comprehensive protection solution
- ➔ DEHNshield FM, based on spark-gap technology
- ➔ Blitzductor XT, vibration and shock proof
- ➔ DEHNpatch, class E/fully shielded version
- ➔ DEHNgate: capable of remote feeding with SMA connector
- ➔ Certified protection solutions
- ➔ Quality products, made in Germany