MULTIFUNCTIONAL POWER STORAGE

electrified by BMW i.

THE PACKAGE SOLUTION
Storage System with original BMW i3 Batteries

Target groups:

- Family houses
- Apartment buildings
- Charging stations for E-Mobility
- Agriculture, farms
- Small and medium businesses
- Industrial enterprises
- Grid operators
- Municipal structures

Applications:

From small to large systems as a complete solution

We offer besides a standard system with an inverter and a BMW i3 HVS module (8 kW - 22 kWh) also the possibility of flexible connection of several BMW i3 HVS modules.

Available are different sizes with flexible performance and storage sizes, e.g.: 16 kW / 22 kWh, 44 kWh, 66 kWh, ... to 500KW / xxMWh.

By cascading the individual systems we can build "MW energy storage parcs" from small, flexible units, which are grid connected in a container or work as a swarm.

Storage System with 22 kWh battery capacity

Large storage system in container / station construction

Storage System with 88 kWh battery capacity
Storage System with original **BMW i3 Batteries**

**Function / Characteristics:**

Size, type and location of generation plants and consumers can be independently designed and installed regardless of the specification of the storage system - as this is connected by AC. It is just necessary to detect the flow of energy at the grid reference point - the energy flow is then regulated by charging or discharging of our intelligent storage system.

**Technology:**

- Quality power electronics and control system (Siemens Industry standard components).
- Modern, safe, cell technology of the BMW i3.
- Integration is possible in higher-level control systems / process control.
- Monitoring, control via integrated display and VPN routers.
- Long service life and high cycle stability.
- High system efficiency.

**Installation:**

- Installation site: operating rooms, basements, utility rooms.
- Grid connection possible at any point because of AC coupling.
- Suitable for any kind of power generation: PV, wind, cogeneration, hydropower, grid power.
- Construction is modular and scalable.
- Easy transport (cabinet and battery disconnected), therefore no separate transport registration is necessary.

**Available software modules:**

- Regulation of PV supported own consumption.
- Energy management for charging stations.
- Load shedding, load transfer.

- Primary control power (in cooperation with energy companies).
- Remote access, data logging and maintainability over the Internet with VPN - connection.
- Peak-shaving, i.e. limiting the load peaks in an average over 15 minutes to avoid increased network charges for service provisions to the energy supplier.
Technical Data Battery Storage System

BMW i3 Battery:

Nominal Capacity: 22 / 33 kWh up to xxx MWh cascadable
Battery Manufacturer / Type: original Battery from the BMW i3
Technology: High Voltage Battery with Lithium-Ion Cells
Depth of discharge (DOD): 87%
Safety: BMW i3 Automotive Safety Standard
Capacity Guarantee by BMW: 10 Years *

BECK Power and Control Unit:

Output AC Inverter: from 8 kW up to xxx MW cascadable
Mains Supply: 400 V AC 3 - phase
Allowed Battery Connection: BMW i3 High Voltage Battery
System Guarantee by BECK: 5 Years *
Visualisation, Data Evaluation: Via Web Portal and Local Display
System Access/ Remote Control: Via Webbrowser with PC, Tablet, Smartphone
Possible Functionality: Regulation of PV supported own consumption, Limiting of Peak Loads, Operation in Isolated Networks
Options: Rack for Assembly with Battery, complete Container solutions

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