

also available in
Lion technology
or **hybrid** as of
autumn 2016



grid | systemizer

Intelligent Energy Storage System

- Frequency Stabilisation
- Grid Stabilisation
- Decentral Energy Sourcing
- Peak-Shaving
- Off-grid applications

- Modular and extendable solution
- Optimal cost - efficiency/effect

Challenge

The growing integration of volatile renewable energy into the electrical grid results in new challenges to Power Companies, grid operators as well producers and consumers of electric energy. The power generation from wind and sun cannot be controlled in the same save way as the power generated by conventional power plants. As a result the future energy might be generated at times with no energy consumption or there will be request for energy when the renewables are not available.

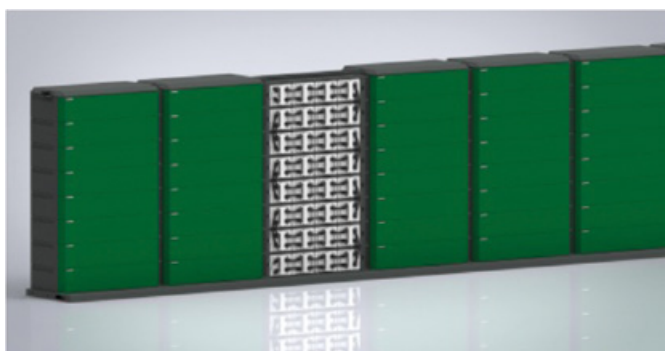
Solution

HOPPECKE has developed the grid systemizer family as a "plug & store" turnkey solution. Intelligent Battery Energy Storage Solutions like the HOPPECKE grid systemizer can play an important role in handling this imbalance and its related cost in a most effective and intelligent way.



Technical data **grid | systemizer**

Type	1.0 MW
Maximum power	1.4 MW
Nominal Capacity	1920 kWh, C ₁₀ (depending on application)
Low Output Voltage	620 VAC, 50/60 Hz
Medium Output Voltage (optional)	10 - 30 kVAC, 50/60 Hz
Dimensions (LxBxH)	
Battery system	12.5 m x 3.4 m x 3.0 m
Power Electronics (incl. Medium Voltage)	12.5 m x 3.4 m x 3.0 m
Foundations	concrete (by customer according to HOPPECKE instructions)
Operating Temperature	-20 to 45 °C (Climatisation, optional)
Operating Humidity	up to 95% (non condensing)
Battery Technology	HOPPECKE Advanced ESS-Lead Acid, Valve regulated
Weight	
Battery System	appr. 70 tons
Power Electronics (incl. Medium Voltage)	appr. 20 tons
Life cycles	depending of individual application
Response time	<< 1 sec. on ext. Request
Driving Signal	Customer specific



HOPPECKE Battery in ESS Technology (modular stacks)

Features

- Innovative bidirectional IGBT-Inverters
- Innovative ESS-VRLA Battery System
- Full Battery Monitoring (optional)
- Individual BMS/EMS-System (adaptable projectwise)
- Fully online surveillance (optional)
- Optimised, energy efficient climatisation
- Fluid cooling of Power Electronics
- Full safety System according to valid norms
- Fully temperature controlled

We make electric power available for everybody – everywhere at any time

Please contact us for your projects:

HOPPECKE Batterien GmbH & Co. KG
Bontkirchener Str. 1 · D - 59929 Brilon · Tel.: +49 (0) 2963 61-374 · Fax: +49 (0) 2963 61-270
E-Mail: reservpower@hoppecke.com · www.hoppecke.com

