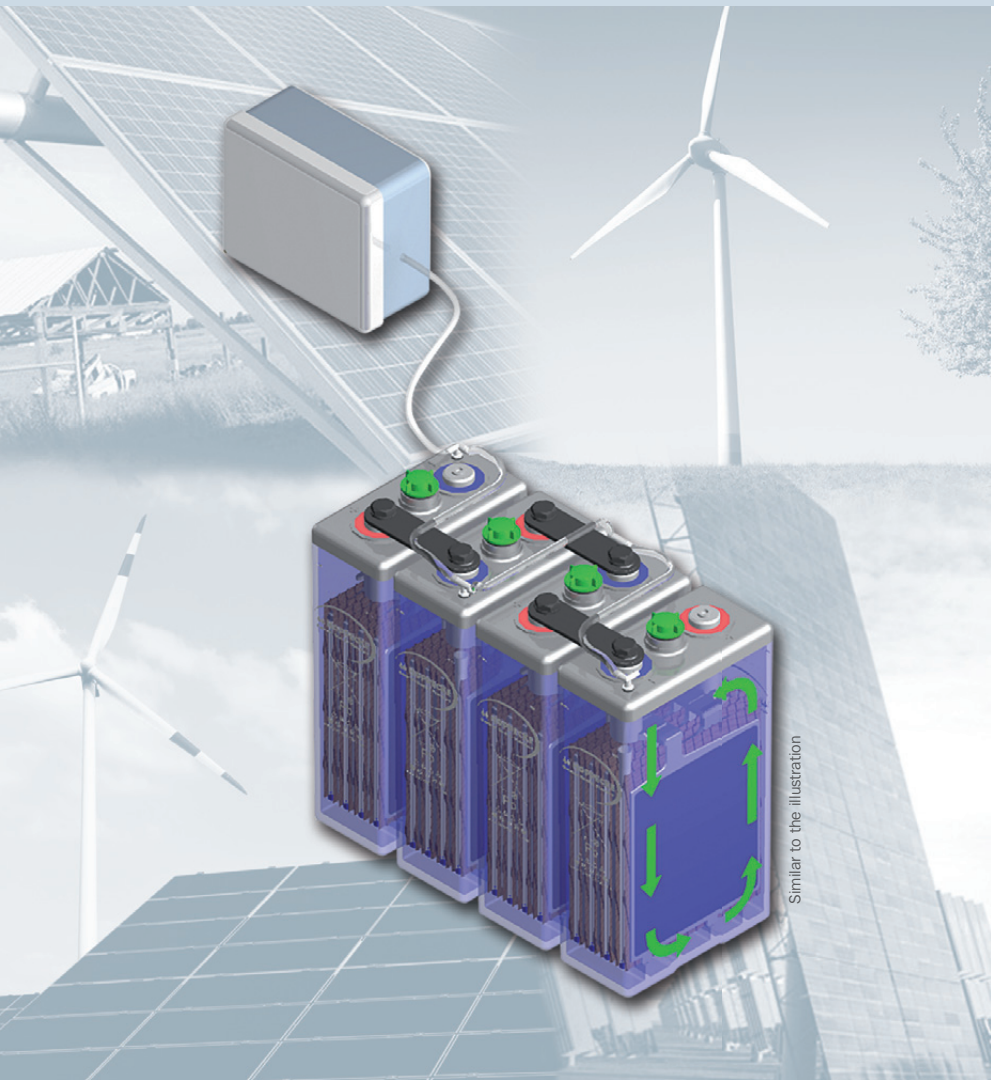
Electrolyte Circulation System

Motive Power Systems
Reserve Power Systems
Special Power Systems
Service

Your benefits with HOPPECKE Electrolyte Circulation System

- **Economic recharge** - increased charging efficiency, significant reduced recharge time and cost reduction
- **Environment-friendly** - reduced runtime of additional (Diesel) generators and cost savings
- **Extended battery service life** - no acid stratification
- **Minimum maintenance costs** - maintenance free pump system (automatically controlled)
- **Reduced battery service costs** - reduced water loss for longer refill intervals



Typical applications

- **Solar-/Off-grid applications**
  Power supply for remote off-grid applications and isolated power networks, drinking water supply systems, healthcare facilities
- **Telecommunications**
  Mobile phone stations
  BTS-stations
  Off-grid/on-grid solutions
- **Traffic systems**
  Signalling systems
  Lighting

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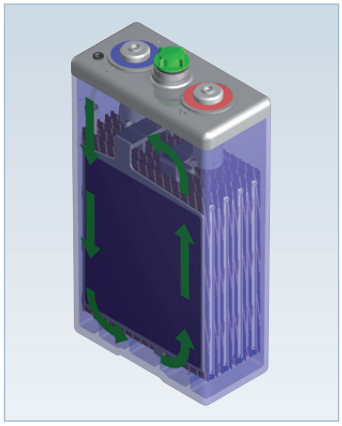
Electrolyte Circulation System

Operation concept, technical characteristics and dimensions

Operation concept

The HOPPECKE Electrolyte Circulation System pumps ambient air to the bottom of each battery cell. Emerging air bubbles rise through the electrolyte, ensuring a homogeneous electrolyte density distribution in each cell. The system is switched on and off automatically and is virtually maintenance free.

The system is easy to install (plug & play), works independently and can be retrofit to OPzS solar.power batteries. For safe operation the system is equipped with maintenance free pump motor and filter for air intake.



Increase of efficiency and cost savings

Typically up to 120% of discharged energy need to be recharged in order to reach the initial state of charge (Vented lead acid battery types). This charging factor includes the **elimination of acid stratification**.

Application of the HOPPECKE Electrolyte Circulation System reduces the required charging factor significantly. Increase in efficiency is up to 15% compared to charging without the Electrolyte Circulation System. Therefore **less time and energy** is required to recharge the battery and to achieve a homogeneous electrolyte distribution.
The Electrolyte Circulation System **reduces also service costs** because of reduced water loss compared to conventional charging.

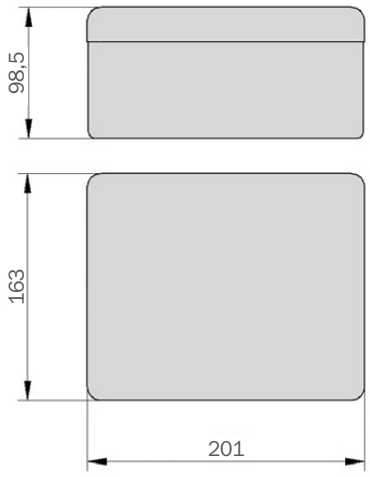
Moreover HOPPECKE Electrolyte Circulation System **increases service life** of the battery and provides environmental and economical benefits for your entire battery system.

Technical characteristics

Battery	
Applicable Type	OPzS solar.power
Capacity Range at C_{100}	6 OPzS solar.power 910 Ah to 26 OPzS solar.power 4700 Ah

Pump	
Motor	Brushless
Voltage/Current	24 V/48 V DC/ca. 0.8 A/0.4 A during operation
Power Consumption	Ca. 20 W during operation/ca. 25 Wh per cycle (< 100 mW standby)
Volumetric current	720 l/h at 100 mbar

Housing (Pump and Control Unit)



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Form Electrolyte Circulation System EN/11.11/1 K Printed in Germany