



sun | air

Electrolyte circulation system
for vented lead acid batteries

sun | air

Typical application:

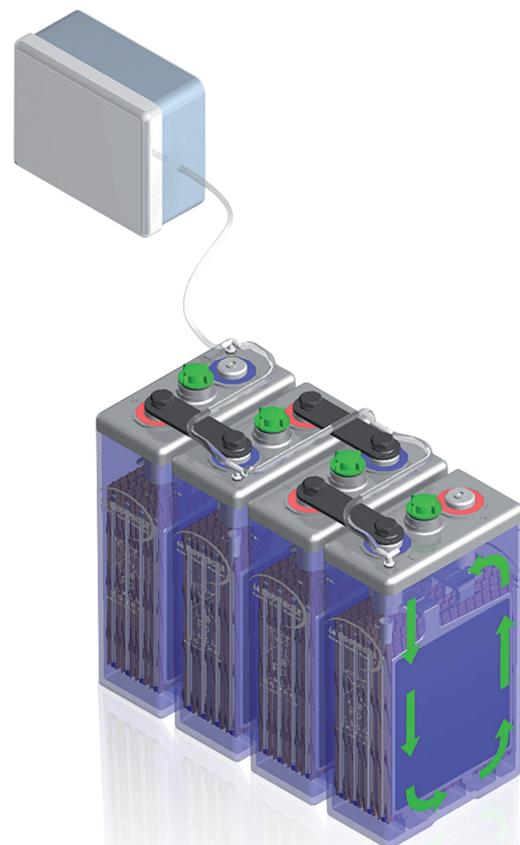
- Off-Grid solutions
- Village power supplies
- Hybrid systems (solar diesel systems)
- Peak shaving /Voltage stabilization
- Stations for mobile communications
- Traffic engineering systems

Your benefits:

- Economic recharge – cost reduction due to increased charge efficiency and significant reduced recharge time
- Permanently safe operation of the battery system – minimization of capacity losses and increased battery life
- Easy installation – plug and play system with automatic operation control
- Reduced battery service costs – water refilling intervals reduced by up to four times

Operating concept

- HOPPECKE sun | air pumps ambient air via a tube system 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 easy to install (plug & play), works independently and can be retrofit to sun | power VL batteries. The energy supply for the pump and the control unit is provided by the battery.
- For safe operation the system is equipped with maintenance free pump motor and filter for air intake.

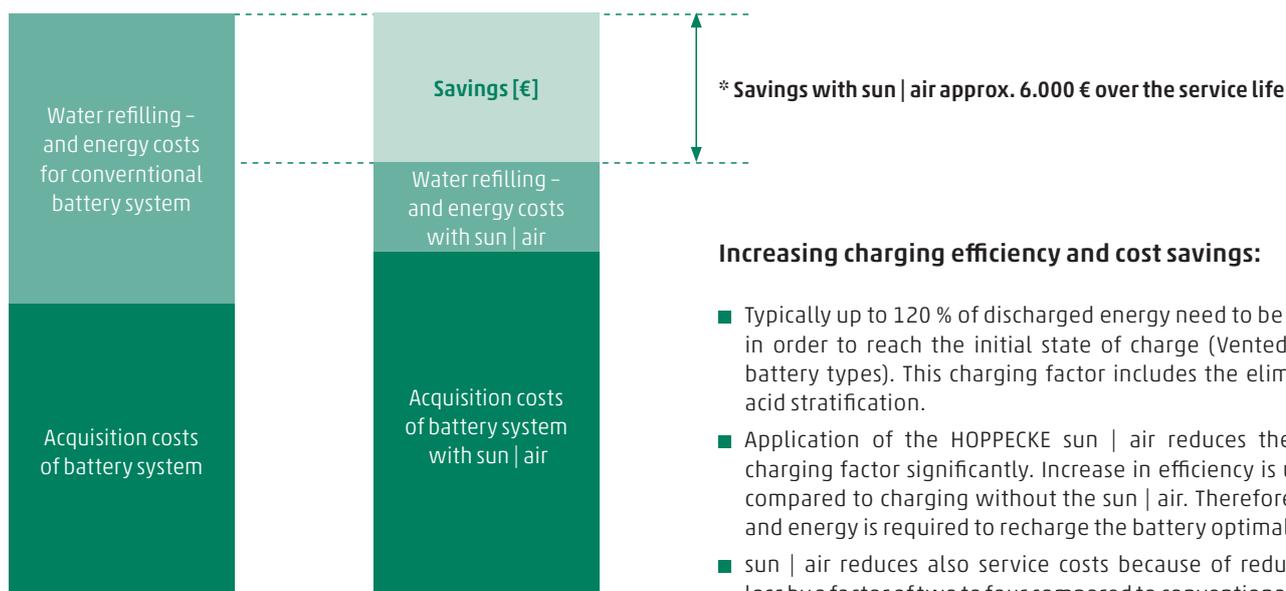


If you are looking for a simple and effective method to optimize your operating costs in cyclic applications, then HOPPECKE sun | air is the right decision.



Cost savings with sun | air

Example of cost savings over battery service life:



Battery type: 24 x grid | power VL 2-2170
 Cycles per year: 365
 DOD: 50 %
 Expected service life: 8 years

* Saving may vary depending on the local conditions

Increasing charging 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 sun | air reduces the required charging factor significantly. Increase in efficiency is up to 15 % compared to charging without the sun | air. Therefore less time and energy is required to recharge the battery optimal.
- sun | air reduces also service costs because of reduced water loss by a factor of two to four compared to conventional charging.
- Moreover HOPPECKE sun | air increases service life of the battery and provides environmental and economical benefits for your entire battery system.

Technical characteristics

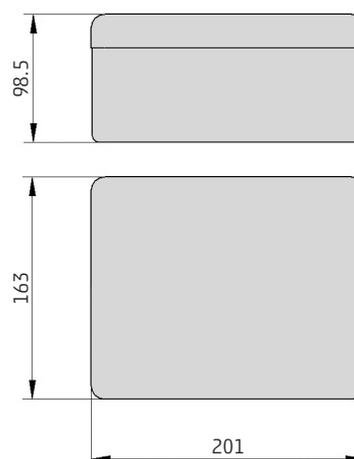
Compatible with the following battery

Series	sun power VL – Series OPzS
Type	sun power VL 2-910 to sun power VL 2-4700

Pump

Motor	Brushless
Voltage/Current	24 V/48 V DC/approx. 0.6 A/0.3 A during operation
Power consumption	approx. 5 W during operation/ approx. 20 Wh per 6 h charge phase (approx. 0.6 W during standby)
Volumetric current	720 l/h at 100 mbar

Soundproofed housing (Pump and Control Unit)



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