

LIQUID COOLING SOLUTIONS

For Battery Energy Storage Systems

Are you designing or operating networks and systems for the Energy industry?
If so, consider building thermal management solutions into your system from the start.

Thermal management is vital to achieving efficient, durable and safe operation of **lithium-ion batteries**, while temperature stability is crucial for battery performance and durability. Active water cooling is the best thermal management method to improve the battery pack performances, allowing lithium-ion batteries to reach higher energy density and uniform heat dissipation.

Our experts provide proven liquid cooling solutions backed with over 60 years of experience in thermal management and numerous customized projects carried out in the energy storage sector. Fast commissioning. Small footprint. Efficient cooling. Reliability. Easy maintenance.





INSIDE THE ENERGY STORAGE CABINET

COMPACT

UP TO 12 KW



ON THE ENERGY STORAGE CABINET DOOR

SIDE MOUNTED

UP TO 12 KW



Power supply: 230 V AC, or up to 800 V DC to directly connect with the battery system with no need for power conversion.



Internal heater: preserves battery life time in winter time maintaining a stable minimum temperature.



Small footprint: for an easy integration inside the battery cabinets and enclosures.



Communication protocols: error/warning and status communication for integration with your Battery Management System.



Inverter pump and compressor: for a better energy management during charge and discharge.



Shock and vibration tested according to IEC 60721: suitable for stationary and mobile installations.



Outdoor installation: safely operates in cold and hot regions, between -25 and +50°C.



EC brushless fans and micro-channel condenser: high energy efficiency and reliability.



CE / UL Certifications: Suitable for worldwide installation.



Environment protection: our chillers for energy storage systems focus on reducing CO₂ footprint.



Service friendly design: for easy on-site access.



Low noise emissions: supporting noise pollution reduction.

Our experts will provide guidance from the ideation stage right up to the execution of your project.

Global Technical Service

24/7 worldwide presence | Commissioning, repair and maintenance | F-GAS leakage tests | Spare part kits | Service trainings | Warranty extension | Customized service contracts | Customized stocks | PSS - Pfannenberg Sizing Software



Click or scan the QR code to find the nearest Pfannenberg Sales Office.