PowerCore

The modular ESS made in Germany

ERLOS

An energy storage system based on high quality lithium-ion modules.

USE-CASES:

- **Self-consumption optimisation of solar and wind power plants**
  - Storage of surplus energy from renewable energy sources Energies - consumption of this energy when it is needed.
  - Increasing the degree of self-sufficiency for a more independent energy supply

- **Zero feed-in**
  - Sell surplus electricity from renewables cheaply and use expensive electricity on demand from the provider
  - With the Powercore, you can also use your electricity generated all day long

- **Peak-Shaving**
  - Depending on the customer's demand, the mains supply is limited. The difference between the set upper limit and the demand is compensated by the storage system
  - Savings on expensive power charges
  - More even power draw from the grid

- **Direct connection and control of charging stations**
  - Relief of the grid connection point through
  - buffer function of the storage unit
  - High charging power when charging e-vehicles is absorbed by the storage unit
  - The grid connection is more constant and less stressed
  - The expensive and time-consuming expansion of grid connection points can be avoided

- **Load Management**
  - Control of different (fast) charging points incl. time and priority control
  - Optimize your energy consumption
  - Targeted control of large consumers (e.g. pumps, heaters, etc.)

- **Achieving CO^2 neutrality**
  - By using 2nd-life battery modules with German OEM quality, our storage is a pioneer in terms of CO^2 neutrality
  - The possible savings in energy consumption further increase the effect

KEY ADVANTAGES:

- **Modularity** through modular system and innovative container concept.
- **Efficient inverter technology** with intelligent, **multi-use energy management system** and **high compatibility**.
- **Intelligent battery management system incl.** real-time data acquisition for **maximum safety and performance**.
- Storage units can be coupled up to 2.5 MWh and offer **high supply security** through decentralized topology.
- Direct connection of **(fast) charging stations** up to 260 kW.
- High quality due to in house **production in Germany**.
- **Innovative design** in a 10-foot container for **easy maintenance and high safety.**
- **Sustainability** using tested 2nd-life batteries from the automotive industry.

EASY FINANCE
different ways of finance

EASY LAYOUT
Never waste an inch of precious land

EASY TRANSPORT
Tranportable in whole and in part

EASY INSTALLATION
Low requirements for tooling, more convenient for quick connector

EASY MAINTENANCE
Accessible in front, easy and fast replacement

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Configuration	1/3	2/3	3/3
Nominal energy content	186 kWh	376 kWh	558 kWh
Power	88 kW	176 kW	264 kW
Continuous nominal current		440 A per string	
Nominal charge/discharge rate		0,6 C	
Battery voltage level (operating range)		590 to 755 VDC	
Storage architecture	2 Strings each 10 Batt.	4 Strings each 10 Batt.	6 Strings each 10 Batt.
Battery technology		Lithium-ion (NMC)	
Battery balancing		Cell-based balancing by the battery management system	
Dimensions		3000 mm | 2500 mm | 2690 mm	
Total weight	ca. 5 t	ca. 6,5 t	ca. 8 t
Temperature control		Passively directed fan	
Compatible power electronics	1 Refu Inverter	2 Refu Inverter	3 Refu Inverter
Required capacity of auxiliary power supply		16 A, 400 V	
Interface for power electronics		Modbus TCP	
Standards and guidelines		VDE-AR-N 4105, VDE-AR-N 4110	
Transport safety Battery		UN-T 38.3	

Multi-Use concepts:

- Load peak management
- Self-consumption optimization
- Sale of green energy
- Grid connection extension

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