









MOBILE ENERGY STORAGE

SYSTEM IN A TRAILER UP TO 1.5 T

-  Mobility – complete system in a trailer up to 1.5 t GVW.
-  Automatic energy management (EMS/BMS).
-  Compatible with PV, grid and generator.
-  Integrated fire protection, heating, and ventilation system.
-  Ability to power receivers and charge electric vehicles.
-  Ready for operation in low temperatures.

The system consists of a LiFePO₄ energy storage unit, a three-phase ESS inverter, an integrated energy management system, and safety systems. Energy can be drawn from a PV installation, the power grid, or a power generator.

Available operating modes:

- ON-GRID – grid connection, optimization of own consumption
- OFF-GRID – island operation without grid access
- BACKUP – automatic switchover in the event of a power failure
- PV priority / Power supply priority / Battery priority
- Forced charging and discharging (time schedule)

Safety system:

- Advanced BMS system
- Integrated fire detection and extinguishing system
 - Overcurrent and overvoltage protection
- Temperature monitoring and active ventilation
- Remote monitoring (WiFi / LAN / RS485 / CAN)

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Parameter	10KW/20kWh	20KW/40kWh	40KW/40kWh	40KW/60kWh	40KW/80kWh	40KW/100kWh
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Technical specifications –
Energy storage

Cell Technology	LiFePO4					
Total Capacity	50 Ah					
Nominal Voltage	409,6 V	2x 409,6 V	2x 409,6 V	2x 614,4 V	4x 409,6 V	4x 512 V
Total Energy	20,4 kWh	2x 20,4 kWh	2x 20,4 kWh	2x 30,7 kWh	4x 20,4 kWh	4x 25,6 kWh
Rated Charge/ Discharge Current	30 A, 0.6C					
Design Cycle Life	6000, 0.5C at 25 °C, 80% DOD, 80% SOH					
Operating Temperature	Charging Temperature: -5 °C~55 °C/5 °F~131 °F Discharge Temperature: -15 °C~55 °C/5 °F~131 °F					
Self-Discharge Rate of Module	≤2% per month, at 25 °C/77 °F					
Ingress Protection	IP55, in stacked up state					
Communication	CAN / RS485 / WiFi					
Certificates & Standards	IEC 62619/EN 61000-6-1 & EN 61000-6-3/UN38.3/RoHS, REACH					
Warranty [years]	10 years					
Trailer load capacity [kg]	913	913	913	913	1388	1506

AC output power (continuous)	10 kW	20 kW	2x 20 kW	2x 20 kW	4x 10 kW	4x 10 kW
AC output power (peak)	11 kW	22 kW	2x 22 kW	2x 22 kW	4x 11 kW	4x 11 kW
Frequency	50 Hz					
Max. PV input voltage	1000 V					
Battery voltage range	150V-600V	160V-950V			150V-600V	
EV charger power	4.1kW to 22kW					
EV connector type	Type 2 Socket with Shutter					
Inputs:	PV / GRID / Generator					
Outputs:	AC / BACKUP					
Trailer dimensions (L x W x H) [mm]	4630x1960x2410mm				4060x1750x2060mm	
Permissible total weight [kg]	1500kg	1500kg	1500kg	1500kg	2000kg	2000kg
Fire protection system / HVAC	Yes					

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