YAHUA

Mobile Energy Storage Power System

SYSTEM

Product Overview

1.Built with high-safety LFP battery cells, fully integrated with BMS, PCS and EMS for full-link intelligent control

2.Modular integrated design, supporting seamless on/off-grid switching, direct PV connection, EV DC fast charging and cloud remote O&M

3.Physical separation design for battery & electrical compartments, with built-in active fire protection system for multi-layer safety

4.100% replacement for traditional diesel generators, zero emission & low noise, ideal for emergency power guarantee, outdoor construction and temporary power supply scenarios

5.High reliability, low carbon & energy efficient, with superior total cost of ownership

Key Highlights

- Safe LFP Battery Cells, ≥6000 Cycles Lifespan
- Full-Link BMS/PCS/EMS Synergy, System Efficiency ≥95%
- Millisecond-Level On/Off Grid Seamless Switch, Zero Power Interruption
- Direct PV Access Support, Self-Generation for Cost Reduction
- DCDC Output, Compatible with EV Fast Charging
- Dual Compartment Isolation + Built-in Fire Protection, Multi-Layer Safety
- Cloud Remote Monitoring, Full-Lifecycle Smart O&M

Model: 50kW/100kWH

Configuration Parameters		Battery Parameters	
Grid Type	3L+N+PE	Battery Type	LiFePO4
Rated Power	50kW	Rated Capacity	125Ah
Rated Voltage	380V	Rated Energy	100kWh
Rated Current	72A	Charge/Discharge Rate	⩽1C
Charging Time	1.5-2 hours	System Param	
Max. Efficiency	0.97	Cooling System	Air Cooling
Overload Capacity	x1.1 Long-term	Fire Protection	Aerosol
Rated Frequency	50Hz	Noise Level	60dB
Three-Phase Imbalance	1	Operating Temp.	-25° C to 50° C
Power Factor	1	Protection Class	IP54 (Outdoor)
Grid THDi	⩽3% at full load	Dimensions (mm)	W1000xH1000xD1200
Grid Connection Point	380V	Weight (kg)	960KG
PV	MPPT Range: 200V-900V	Rated power: 40KW	

Item		DC Version	AC Version
Battery Module Basic Config	Cell Brand	EVE New Grade-A Cell	EVE New Grade-A Cell
	Cell Type	LiFePO4 (LFP)	LiFePO4 (LFP)
	Battery Model	125Ah Power Cell	125Ah Power Cell
	Voltage Platform	768V High Voltage	768V High Voltage
	Usable Capacity	96 kWh	96 kWh
DC Module	Charging Module Brand	Yonglian	Not Supported
	Isolation Type	Isolated (Anti-leakage)	
	Recharge Mode	Fast charger recharging (Same as EV efficiency)	
	DC Fast Charge Output Voltage Range	200-1000V (Supports old/new GB)	
	DC Fast Charge Rated Power	DC Fast Charge 50kW	
AC Charge/ Discharge Module	Inverter Brand	Not Supported	Yingbo
	Inverter Type		Industrial 3-phase 4-arm inverter
	Grid-tie Only		Yes
	Off-grid Support		Yes
	100% 3-Phase Imbalance Support		Yes (Output 380V/220V)
	AC Rated Discharge Power		50kW
	AC Recharge Mode		380V 3-phase Power
	AC Recharge Power		50kW
	Peak Shaving		Yes
Standard Config	EMS Energy Management System	Yes	Yes
	7"Touch Screen	Yes	Yes
	loT SIM Card	Yes	Yes
	Auto-shutdown on low battery	Yes	Yes
	Electric heating (cold regions	Yes	Yes
	Remote Monitoring Platform	Yes	Yes
Fire Safety Config	Sensing Method	5-in-1: Smoke, Humidity, Temp, etc.	5-in-1: Smoke, Humidity, Temp, etc.
	Fire Suppression Type	Aerosol	Aerosol
	Electronic Control	Yes	Yes
	Multi-level Fire Protection	Yes	Yes

Application scenarios

- Outdoor Construction Power Supply
- Emergency Rescue Power Guarantee
- Large Event Temporary Power Supply
- Residential & Commercial Backup Power
- Mobile EV Charging Service

Solve Low/high voltage at the end of the substation area
In the area where the voltage at the end of the substation is not qualified , use T Connect low-voltage lines to solve the problem during peak load periods low voltage (<198V)

By connecting to the energy storage system of the distribution box, it can effectively solve the electricity consumption problems and load peak issues in mining areas, industrial parks, hospitals, and other similar fields

Emergency power supply
Build temporary power supply systems in scenarios such as line maintenance, planned power outages, and damage to power equipment caused by floods.

DC EV charging

Solar energy storage system

Emergency Power Supply
(three-phase power)