



**UNIQUE
ENERGY**

Intelligent Battery Energy Storage System Solution Provider



Unique Green Energy (Xi'an) Co., Ltd.



Residential Battery Energy Storage System

UNIQUE ENERGY



High performance BMS chip



Safe and reliable



Maintenance free



Easy to carry and installation



Simple switch operation



Auto running and adjustment



Smart protection



Climate tolerant



High energy density



Long cycle life



Support parallel use

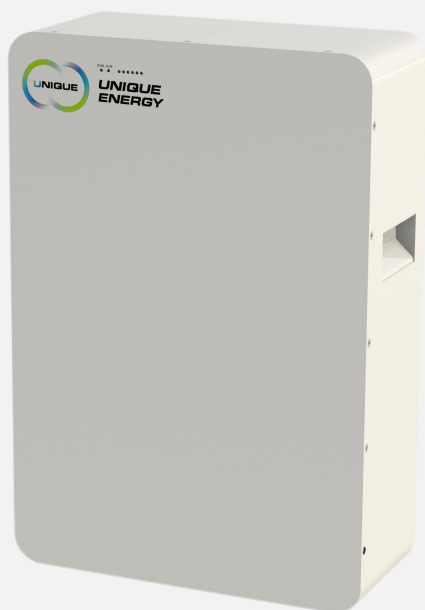


Modular design Flexible configuration

Wall Mount Battery Energy Storage



- ✔ Support RS485, CAN communication
- ✔ Support up to 16 parallel machines, with automatic address allocation and intelligent management
- ✔ Support Bluetooth, display, mobile APP, etc. to switch PCS protocol
- ✔ Support 4G module (optional) remote upgrade maintenance and remote data cloud platform two-way interconnection

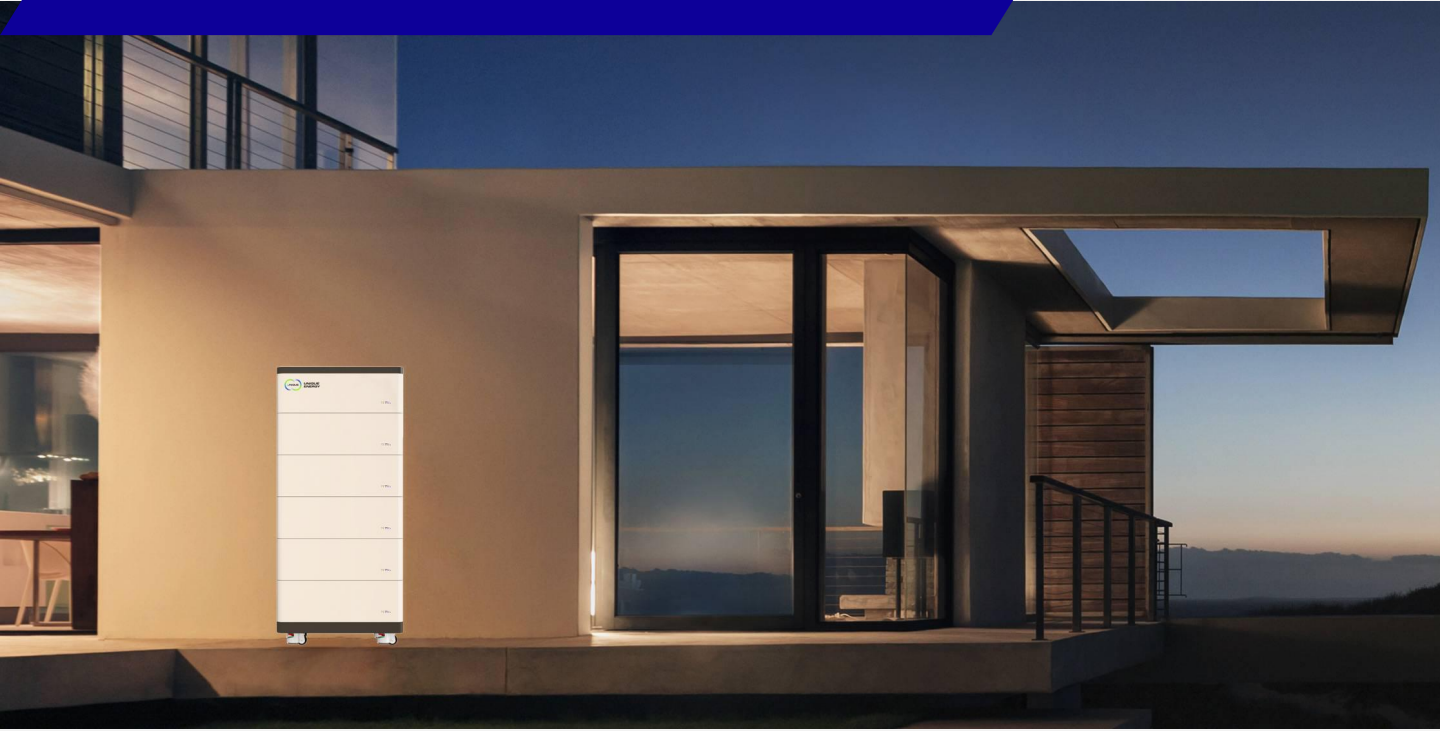


Cover Customizable

Wall Mount BESS Parameters

Model	UPACK5 ⁰	UPACK7.5 ⁰	UPACK10 ⁰
Battery Type	LFP		
Configuration	1P16S		
Nominal Capacity	100Ah	150Ah	200Ah
Nominal Voltage	51.2V		
Charge Cut-off Voltage	58.4 ±0.5V		
Discharge Cut-off Voltage	40 ±0.5V		
Charge Current	50A (Max100A)		
Maximum Operating Current	100A (Max100A)	100A (Max200A)	100A (Max200A)
Equilibrium Current	60 ~ 100mA		
Voltage Acquisition Accuracy	±0.2mV		
Communication	RS485/232		
Protection Level	IP20(Indoor)/IP65(Optional)		
Ambient Temperature	Charging Temp: 0~50°C; Discharging Temp:-20~60°C		
Storage Temperature	-20~35°C @ 60%±25% Humidity		
Dimension	580*400*170mm	620*430*190mm	620*430*230mm
Weight	≈48kg	≈72kg	≈90kg

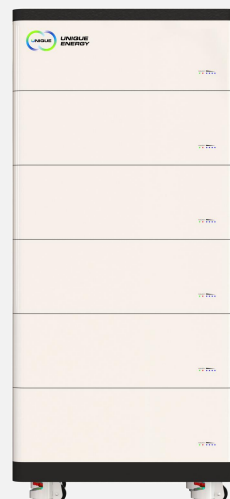
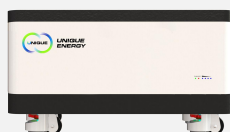
Rack-Mounted Battery Energy Storage



- ✔ 4U standard rack-mounted battery design; easy to install and can be equipped with a cabinet
- ✔ 4-way battery temperature detection, support RS485, CAN communication and LCD screen display
- ✔ Support Bluetooth link to mobile phone APP, display screen, etc. to switch inverter communication protocols
- ✔ Support customized BMS communication protocol, 4G module, WIFI module, GPS positioning function, etc.
- ✔ Support 4G module (optional) remote upgrade maintenance and remote data cloud platform two-way interconnection
- ✔ Support up to 16 parallel machines, support capacity expansion, parallel machine automatic address allocation, intelligent management



Up To 16 Parallel Machines



Rack-mounted BESS Parameters

Model	UPACK51100	UPACK51200	UPACK51600
Battery Type	LFP		
Configuration	1P16S		
Nominal Capacity	100Ah	200Ah	600Ah
Nominal Voltage	51.2V		
Charge Cut-off Voltage	58.4 ±0.5V		
Discharge Cut-off Voltage	40 ±0.5V		
Charge Current	100A (Max200A)		
Maximum Operating Current	200A (Max300A)	200A (Max300A)	200A (Max300A)
Equilibrium Current	60 ~ 100mA		
Voltage Acquisition Accuracy	±0.2mV		
Communication	RS485/232		
Protection Level	IP20(Indoor)/IP65(Optional)		
Ambient Temperature	Charging Temp: 0~50°C; Discharging Temp:-20~60°C		
Storage Temperature	-20~35°C @ 60%±25% Humidity		
Dimension	580*460*270mm	580*460*460mm	620*430*1245mm
Weight	≈55kg	≈102kg	≈290kg

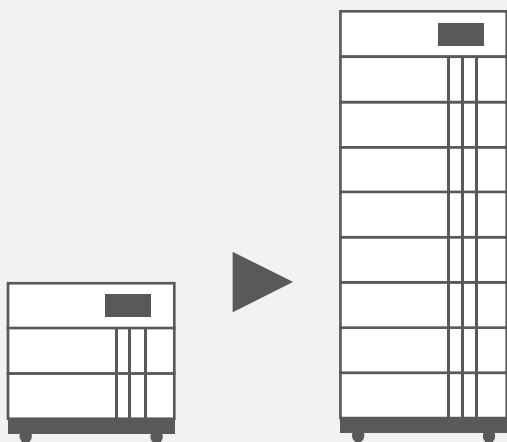
High Voltage Machinery Battery Energy Storage



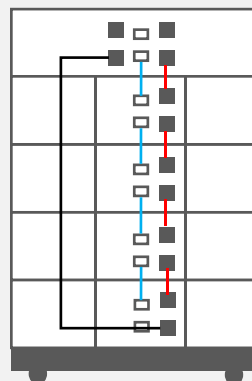
- ✔ Capable of High-Powered Emergency-Backup and Off-Grid Functionality
- ✔ Highest Efficiency Thanks to a Real High-Voltage Series Connection
- ✔ Built -in fire extinguishing device, automatic processing of super -early warning thermal discharge state
- ✔ The Patented Modular Plug Design Requires no Internal Wiring and Allows for Maximum Flexibility and Ease of Use
- ✔ Grand A Lithium Iron Phosphate (LFP) Battery: Maximum Safety, Life Cycle, and Power
- ✔ Compatible With Leading High Voltage Battery Inverters
- ✔ Highest Safety Standards

UPACK Series

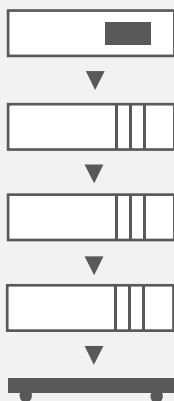
HVM Battery Modules - flexible / efficient / simple



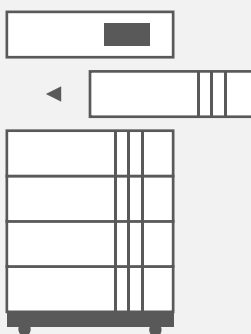
- One HVM battery system is composed of 2 to 8 HVM battery modules that are connected in series to achieve a usable capacity of 9.6 to 38.4 kWh.
- Ability to scale by adding HVM modules later.



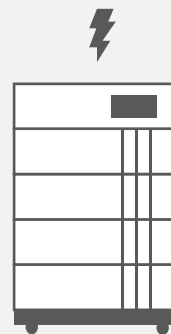
Plug connection on the back
Quick plug connector series wiring



9.6 ~ 38.4 kWh
Tailored Sizing for
Each Application




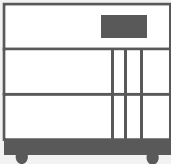
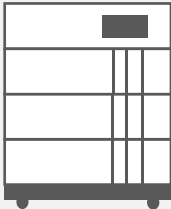
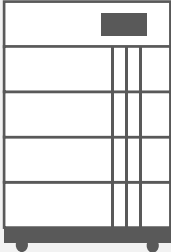
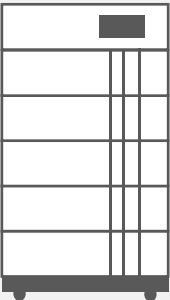
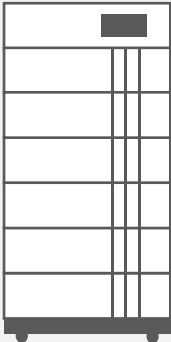
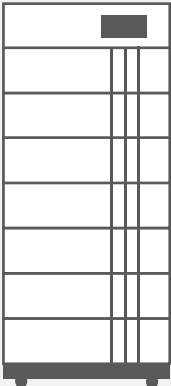
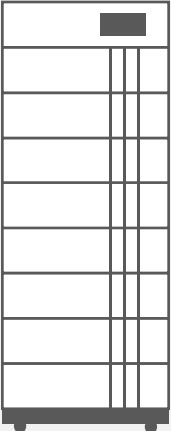
Extend Anytime
Easily Adapts to New
Requirements



High Power
Power of Every Application

UPACK Series

HVM BESS Parameters

Model	UPACKHV15S	UPACKHV30S	UPACKHV45S	UPACKHV60S
System Demo				
Number of Modules	1	2	3	4
Battery Capacity	100Ah	100Ah	100Ah	100Ah
Battery Energy	4.8Kwh	9.6Kwh	14.4Kwh	19.2Kwh
Battery Voltage	48V	96V	144V	192V
Standard Charge/ Discharge Current	20A	20A	20A	20A
Dimension (L*W*H)	570*380*167mm	570*380*666mm	570*380*833mm	570*380*1000mm
Weight	41kg	107kg	148kg	189kg
Model	UPACKHV75S	UPACKHV90S	UPACKHV105S	UPACKHV120S
System Demo				
Number of Modules	5	6	7	8
Battery Capacity	100Ah	100Ah	100Ah	100Ah
Battery Energy	24Kwh	28.8Kwh	33.6Kwh	38.4Kwh
Battery Voltage	240V	288V	336V	384V
Standard Charge/ Discharge Current	20A	20A	20A	20A
Dimension (L*W*H)	570*380*1167mm	570*380*1334mm	570*380*1501mm	570*380*1668mm
Weight	230kg	271kg	312kg	353kg

UPACK Series

General

Battery Type	Lithium Iron Phosphate (LFP)
Nominal Voltage	96V ~ 384V
Operating Voltage Range	80V ~ 438V
IP Protection	IP54
Installation	Floor Installation
Operation Temperature	-10 ~ 60°C

Features

BMS Monitoring Parameters	SOC, System voltage, Current, Cell voltage, Cell Temperature, PCBA temperature measurement
Communication Port	CAN
Warranty	5 Years

Remarks

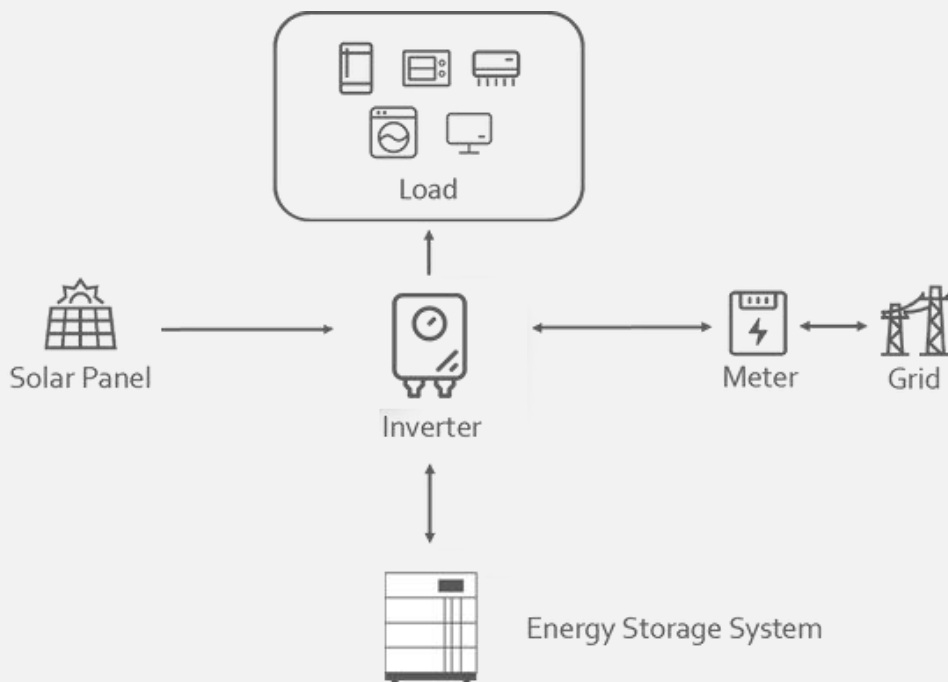
Grade A quality LiFePO4 battery, more than 6000 cycles in 80% DoD @25°C

Battery discharge: -10 ~ 60°C

Battery charge: 0 ~ 60°C

Compatible with 96V ~ 384V high voltage inverter/UPS

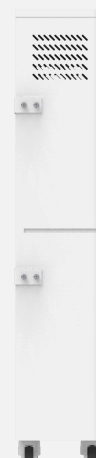
Connection Diagram



All-In-One Energy Storage System



- ✔ MPPT technology, tracking efficiency not less than 99.5%
- ✔ 3.5-inch LCD display, real-time monitoring of system parameters
- ✔ Two AC output modes are optional: mains priority, inverter priority
- ✔ Appearance design patent, IEC, UN38.3, MSDS, ISO certification
- ✔ The mains charging current can be set, and the charging usage of the mains can be flexibly configured according to the demand
- ✔ Isolated RS485 communication interface (effective anti-interference), can be matched with GPRS, WIFI and other modules to realize remote upgrade and maintenance
- ✔ Three charging modes are optional: mains priority, solar energy priority, solar and mains complementary grid, PV, battery power supply priority can be set
- ✔ Configure off-grid hybrid inverter, pure sine wave output, friendly to electrical equipment, optional 3000W/5000W/8000W hybrid inverter, grid-connected models, etc.
- ✔ 4-way battery temperature detection, quick plug-in terminal waterproof and dustproof, fast wiring, stable crimping for mobile use, silent universal wheels, the wheels can be locked and fixed, and other accessories can be installed on the wall for fixing



AIO Parameters

Model	UHOME5 ⁰	UHOME7.5 ⁰	UHOME10 ⁰
Inverter			
Max PV Input Power	4000W		
Max PV Charging Power	4000W		
MPPT Electrical Input (DC)	120~400V		
Number of MPPT trackers/Max Input Current	1/80A		
Output Grid (AC)			
Output Power	5000W		
Output Voltage Range	220V AC (-6% ~ +3%), 230V AC (-10% ~ +3%)		
Output Frequency	50/60 ±0.2%		
Max Conversion Efficiency (DC/AC)	93%		
Efficiency @ Standard Value	91%		
AC Input			
Max AC Input Current	60A		
Acceptable Input Voltage Range	176V AC ~ 264V AC / 40 ~ 65Hz		
Conversion Efficiency (DC/AC)	96%		
Battery Specifications			
Nominal Voltage	51.2V		
Battery Capacity	100Ah	150Ah	200Ah
Max Continuous Charge Current	100Ah	100Ah	100Ah
System			
Dimension	1100*780*230mm		
Weight	~120kg	~140kg	~160kg



Lithium Battery

UNIQUE ENERGY



LiFePO4 battery Lead-acid battery alternative



High capacity



Low consumption



Grade-A battery cell



Super power



Light weight



Long cycle life



Support concatenation



Multifunctional protection



LFP Battery Parameters

Nominal Characteristic

Battery Model	UBOX50	UBOX100	UBOX200
Nominal Voltage	12.8V		
Typical Capacity	50Ah(25°C, 0.2C)	100Ah(25°C, 0.2C)	200Ah(25°C, 0.2C)
Typical Energy	640Wh	1280Wh	2560Wh
Cells Type/Chemistry	P ₄ rismatic-LiFePO		
Gravimetric Energy Density	107Wh/Kg	116Wh/Kg	108Wh/Kg
Dimensions	229*138*208mm	330*173*220mm	483*170*240mm
Reference Weight	6Kg	11Kg	21.2Kg
Case Material	ABS		
Cycle Life	>2000 Cycles (100% DoD)		

Electric Characteristic

Charge Method	CC/CV		
Charge Voltage Range	14.3 ~ 14.6V		
Max Continuous Discharge Current	50A	100A	100A
Max Continuous Charge Current	50A	80A	100A
Discharge Pulse Current (10 sec)	100A	200A	200A
End of Discharge Voltage	10V		

Operation Environment

Charge Temperature	0°C ~ 55°C		
Discharge Temperature	-20°C ~ 60°C		
Storage Temperature	-20°C ~ 60°C		
Protection Class	IP65		



Commercial & Utility Energy Storage System

UNIQUE ENERGY



Modular design



Easy to install and maintenance



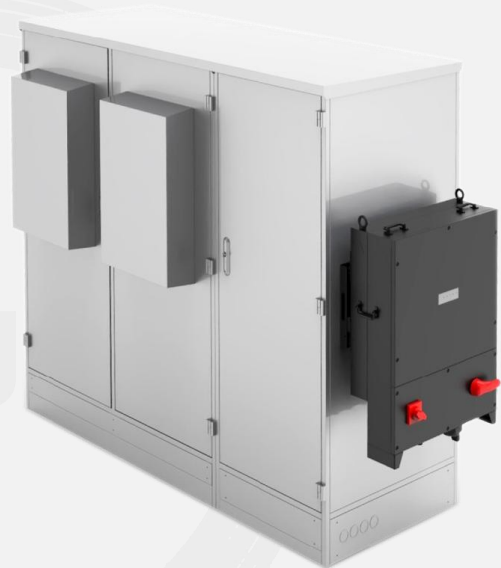
Air condition system



Fire extinguishing system



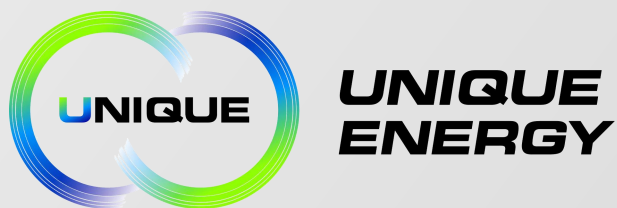
Safe and reliable





Outdoor Cabinet Parameters

Item		Parameters	Remark
Series and Parallel		1P224S	14pcs battery Pack
Nominal Capacity		280Ah	
Nominal Voltage		DC716.8V	
Work Voltage Range		560 ~ 817.6V	2.5 ~ 3.65V
Nominal Energy		200.7kWh	0.5CP
Rated Charging Current		140A	0.5C
Max Constant Charge Current		160A	25±5°C, 0~100% SOC
Rated Discharging Current		140A	0.5C
Max Constant Discharge Current		160A	25±5°C, 3.0 ~3.45V
Rated Power	Charge	100KW	0.5P
	Discharge	100KW	
Operation Temperature Range (Optimal)		25±5°C	Guaranteed cycle life conditions
Power Consumption (Without fan)		30W/(1BPU+1Rack)	110~230V AC power supply
Fan Power Consumption		100W	
Size	800*412*225mm		Without connectors & handles
	840*466*225mm		Include connectors & handles
Weight		2950kg	±50kg
Cabinet Outer Dimensions		H2050*D1000*L2360mm	±20mm Exclude PCS and air conditioner
IP Grade		IP54	
Humidity		65%±20%RH	
Altitude		≤2000m	≤2000m Customizable



Circulating Your Success



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