



# Solar Storage System

## Contact Us

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# 2025

Driving the Future of  
Sustainable Energy and Smart Data Centers



# ABOUT US

We are a high-tech enterprise specializing in the research, development, and manufacturing of energy storage systems, solar power equipment, and intelligent power electronics. With a focus on innovation and quality, HUDA Energy delivers safe, efficient, and intelligent new energy solutions to global customers. Our product lines cover lithium battery systems, solar inverters, photovoltaic panels, solar water pumps, and PCB control boards, supporting diverse applications across residential, commercial, and industrial fields.

HUDA Energy operates under strict quality standards and is ISO 9001:2015 certified. Our lithium battery products have obtained multiple international certifications including UL1973, UL9540, IEC62619, and are listed by the California Energy Commission (CEC). Through continuous investment in R&D and manufacturing excellence, we are committed to driving sustainable energy transformation worldwide.

## 1 Base

### Yiwu Headquarters & Production Base

Our headquarters and sole manufacturing facility are located in Yiwu, Zhejiang Province—an international trade hub in eastern China. The facility integrates product R&D, intelligent manufacturing, testing, quality control, and international business operations all in one location.

The factory is equipped with advanced automated production lines, battery pack assembly workshops, photovoltaic testing labs, and safety inspection equipment. It supports high-capacity manufacturing of wall-mounted and rack-mounted lithium batteries, hybrid inverters, solar modules, solar pump systems, and customized PCBs.

With an annual output capacity of over 300,000 units, our Yiwu factory serves as a strong foundation for fast delivery, consistent quality, and scalable OEM/ODM services. All products are designed to meet international standards and adapt to varied application scenarios across different climate and grid environments.

## 4 Key Modules

### Energy Storage Systems

Lithium battery systems from 5.12kWh to 20kWh, available in wall-mounted and stackable formats, with smart BMS and full UL/IEC/CEC certifications for safety and reliability.

### Photovoltaic Inverters

Off-grid, on-grid, and hybrid inverters from 1kW to 200kW, featuring advanced MPPT control, modular design, and excellent efficiency in various solar applications.

### Solar Water Pump Systems

AC/DC solar pumps for irrigation and remote areas, operating fully off-grid, with 200W to 5kW output for stable, sustainable water supply in rural settings.

### PCB & Power Electronics

Custom PCBs for battery and inverter control systems, built for high stability, long lifespan, low EMI, and smooth integration into energy applications.

## 5 Core Regions

### Yiwu Headquarters & Production Base

Our business covers five major markets across the globe: Asia, Europe, the Middle East, Africa, and South America. Leveraging Yiwu's international logistics advantages and our multilingual sales and support teams, HUDA Energy has built a flexible, responsive global service system.

Through partnerships with regional distributors, EPC contractors, and solar integrators, we provide fast technical support, localized solutions, and stable product supply for both large-scale projects and small-scale deployments. With innovation, integrity, and customer satisfaction at our core, we aim to become a trusted global partner in the new energy industry.



# LITHIUM BATTERY SERIES

○ Lead-Acid replacement to LITHIUM

## PLASTIC CASING

-  Widely used
-  1.2/2.5 Kwh
-  Adapt to various application scenarios
-  LifePO4 battery



Solar systems



RVs



Marine



backup power



Electric Mobility

## PARAMETER

Battery Specifications		
Model No	HDL100S4-1.2K	HDL200S4-2.5K
Battery Cell	Lithium Ion	
Rated Voltage	12.8v	
Capacity	100AH	200AH
Energy	1.2kw	2.5kw
End-of-charge Voltage	14.6v	
End-of-discharge Voltage	10.8v	
Max. charge Current	50/100A	
Max. discharge Current	50/100A	
Dimension (W*H*D)	280*150*400mm	
Gross weight	16kg	
Cycle Life (25±2°C ,0.5C/0.5C ,80%DoD)	5000	
Communication	Bluetooth	

• All date and specifications are subjected to change without notice.

**LITHIUM BATTERY** SERIES

○ Lead-Acid replacement to LITHIUM

**WALL MOUNTED**

 Battery Management System

 4Kwh 12.8V

 Compatible with 20+ mainstream inverters

 LifePO4 battery



Solar systems



RVs



Marine



backup power



Electric Mobility

**PARAMETER**

Battery Specifications	
Model No	HDL314S4-4K
Battery Cell	LiFePO4
Rated Voltage	12.8v
Rated Capacity	314AH
Energy	4kw
End-of-charge Voltage	14.6v
End-of-discharge Voltage	10.8v
Max. charge Current	100A
Max. discharge Current	100A
Dimension (W*H*D)	425.5*245*240mm
Gross weight	32KG
Cycle Life (25±2°C ,0.5C/0.5C ,80%DoD)	8000
Communication	Bluetooth

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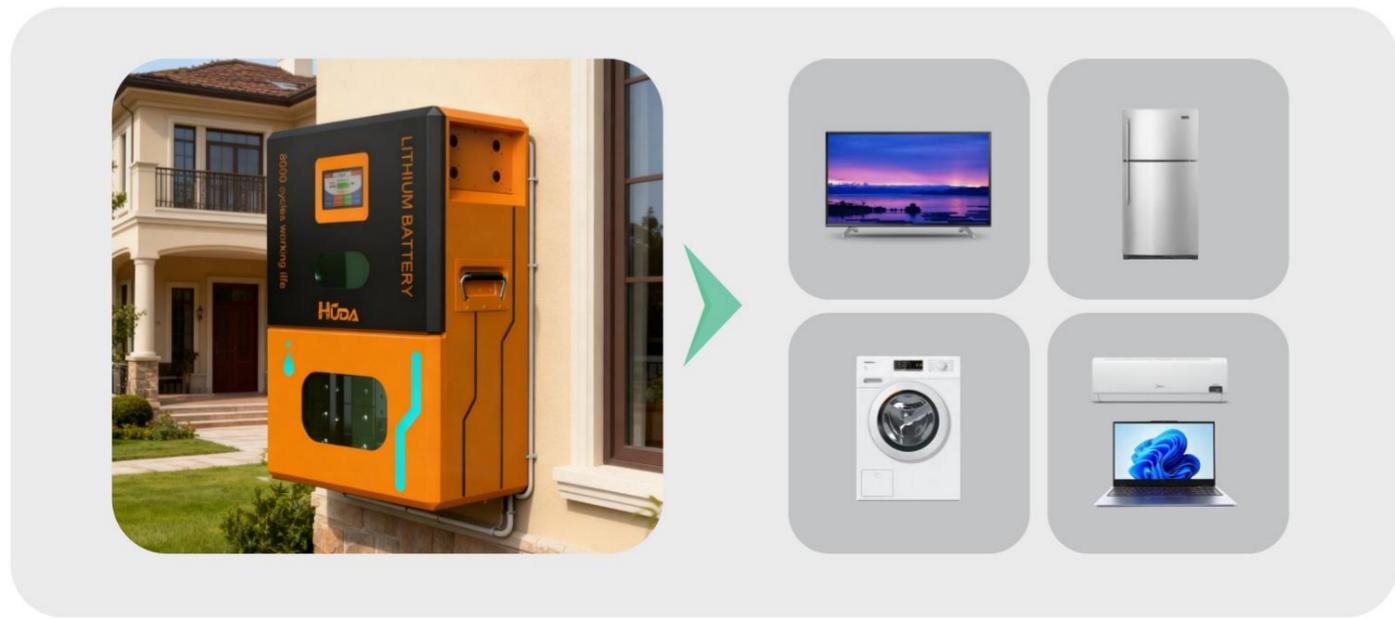
**LITHIUM BATTERY** SERIES

○ Residential lithium storage system

-  Battery Management System
-  5.1/8/10 Kwh
-  Compatible with 20+ mainstream inverters
-  LifePO4 battery



**Lithium wall mounted**



**PARAMETER**

Product Parameters			
Model No	HDL100S8-5.1K	HDL314S8-8K	HDL200S16-10K
Battery Chemistry	LiFePO4 Battery		
Rated Voltage	12.8v/25.6v/51.2v	25.6v	25.6v/51.2v
Capacity	426AH/200AH/100AH	314AH	400AH/200AH
Energy	5.12KWh	8KWh	10KWh
End-of-charge Voltage	29.2V		
End-of-discharge Voltage	21.6		
Max. charge Current	100A	100A	100A
Max. discharge Current	100A	100A	100A
Dimension (W*H*D)	600*407*154mm	650*407*240mm	697*407*240mm
Gross weight	54KG	68KG	83KG
Cycle Life (25±2°C ,0.5C/0.5C ,80%DoD)	5000-8000	8000	5000-8000
Communication Port	RS232/RS485/CAN/WiFi/Bluetooth		

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**LITHIUM BATTERY** SERIES

○ Residential lithium storage system

-  Battery Management System
-  14.3/16/32 Kwh
-  Easy to move
-  LifePO4 battery



**LITHIUM FLOOR TYPE MOVABLE**



**PARAMETER**

Battery Specifications			
Model No	HDL280S16-14.3K	HDL314S16-16K	HDL314S16/2P-32K
Battery Chemistry	Lithium Ion Battery		
Rated Voltage	51.2V		
Capacity	280AH	314AH	628AH
Energy	14.3KWh	16KWh	32KWh
End-of-charge Voltage	58.4v		
End-of-discharge Voltage	43.2v		
Max. charge Current	200A	200A	300A
Max. discharge Current	200A	200A	300A
Dimension (W*H*D)	780*440*270mm	850*440*270mm	850*440*538.5mm
Gross weight	125KG	129KG	255KG
Cycle Life (25±2°C, 0.5C/0.5C, 80%DoD)	6000	8000	8000
Communication Port	RS232/RS485/CAN/WIFI/Bluetooth		

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# LITHIUM BATTERY SERIES

Industrial and commercial



Support in series



High reliability & high security



Two-level and three-level architecture



Master integrated combiner box

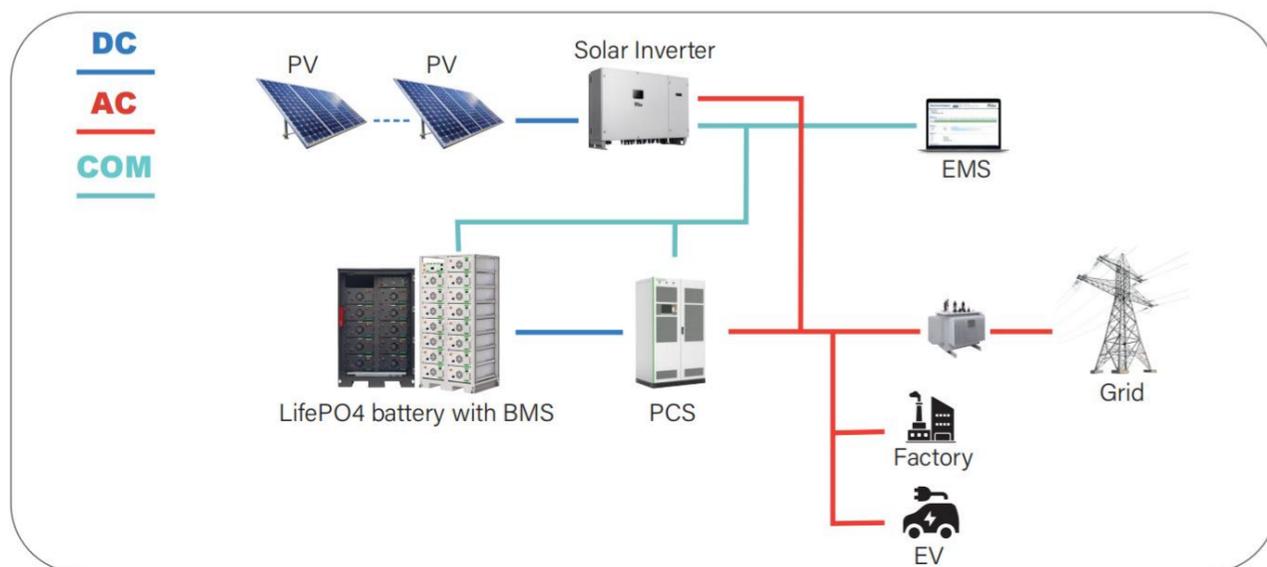


**IN DOOR**

## PARAMETER

Battery Specifications			
Model No	HDL314S60-60K	HDL314S120-120K	HDL314S240-240K
Battery Type	LiFePO4 Battery		
Rated Energy	60KWh	120KWh	240KWh
Nominal Voltage	192v	384v	768v
Rated Capacity	314Ah		
End-of-charge Voltage	219v	438v	876v
End-of-discharge Voltage	162v	324v	648v
Standard Charge Current	100A		
Max. Charge Current	140A		
Standard Discharge Current	100A		
Max. Discharge Current	200A		
Max. Peak Current	250A		
IP Grade	IP20		
Work Temperature Range	Charge: 0°C~50°C DisCharge: -15°C~60°C		
Charge/ Discharge Interface	Waterproof Quick-plug Terminal		
Communication	RS232/RS485/CAN/WIFI/Bluetooth		
Shell Material/ Color	Metal/White (color optional)		
Size(mm)	1000*800*1000mm	1000*800*1600mm	1000*800*2050mm
Weight(kg)	600KG	1200KG	2085KG

All date and specifications are subjected to change without notice.



Mountainous areas and islands



Gas station



Disaster emergency power supply



Factory power supply



Supermarket power supply



PV power generation

# LITHIUM BATTERY SERIES

Industrial and commercial

 PCS+ LiFePO4 Battery+ MPPT + Generator Port

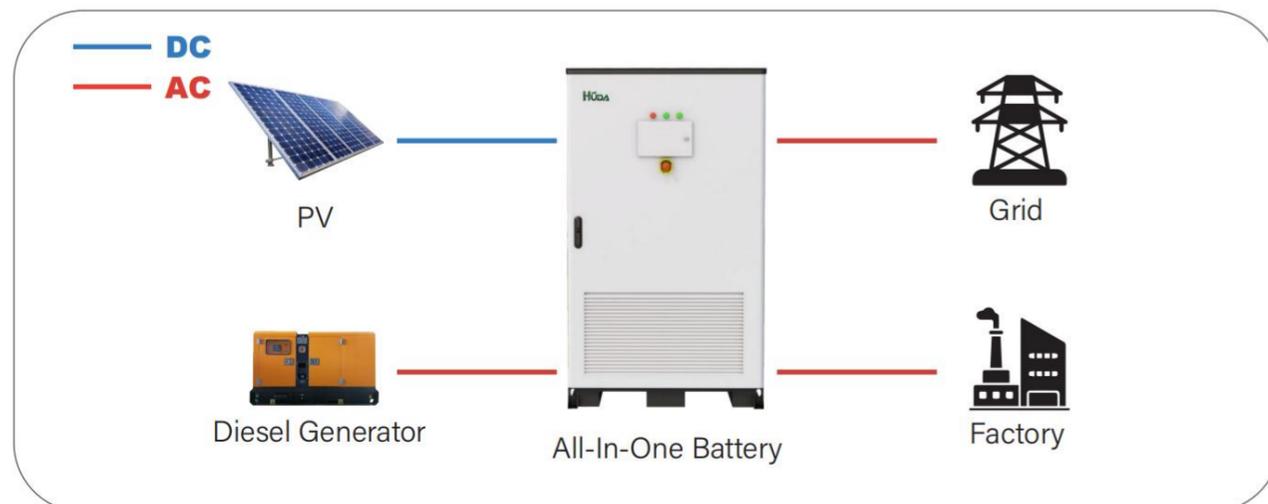
 Integrated fire protection and Air-conditioner

 Integrated BMS/ PCS/ EMS

 Supports multiple units in parallel(Hybrid)



**OUT DOOR**



## PARAMETER

Battery Specifications		
Battery		
Model	HDL314S120-B120K-I60K	HDL314S120-B240K-I100K
Battery Type	LiFe PO4 Battery	
Rated Energy	120KWh	240KWh
Nominal Voltage	384v	768v
Max. Continuous Charging and Discharging Current	140Ah	
Cycle Life (25±2°C ,0. 5C/0 . 5C ,80%DoD)	8000	
Discharge Depth	90% DOD	
PV Parameters		
Max. Power	96KWh	
Max. PV Voltage	800VDC	
MPPT Voltage Range	150~850VDC	
Max. PV Charge Current	40A*4	
MPPT Channels	4	
AC Parameters(On/Off-Grid)		
Rated Power	60kW	100kW
AC Voltage	400Vac/230Vac (L1/L2/L3/N/PE)	
AC Frequency	50Hz/60Hz	
Max. AC Current	75A	85A
Wiring	3P4L	
Paraller Number	3	
System Parameters		
Communication	RS232/RS485/CAN/WiFi/Bluetooth	
IP Grade	IP54	
Fire Protection System	Yes	
Operating Temperature	-10°C~50°C	
Humidity Range	10%~95%RH	
Altitude	<2000m	
Battery Cooling Method	Air Cooling	
Size(mm)	1000*800*1600mm	1000*800*2050mm
Weight(kg)	1200KG	2085KG

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## PORTABLE POWER STATION SERIES

This product is a portable power station with built-in high-efficiency power lithiumion battery, safe lithium battery management system (BMS), efficient thermal management system (TMS) and energy conversion circuit. It features with trolley design, large capacity of 2304Wh, smart inverter, strong load and real fast charging. Application scenarios: family emergency, self-driving travel, outdoor camping, car power supply, medical rescue, field work, aerial photography, etc.

**UPS**  
switch within 20ms

**X<sup>2</sup>-CHARGING**  
80% charged within one hour

**X-Turbo**  
1200-2400W Devices Startup

## FEATURES

Use safe Li-battery as the main part, with the characteristics of small size, high capacity, light weight, high power, portable and so on

Ultra-power X-Turbo technology can drive high-power equipment with peak power of 2000W, expanding the range of use;

Intelligent automatic dynamic charge and discharge management platform, multi-function digital display, real-time display the power, battery voltage, charge and discharge power

Adopt X<sup>2</sup>-CHARGING bidirectional power fast charging technology, realize the intelligent conversion of DC-AC power, and ensure the output of sine wave current comparable to the mains;

## PARAMETER

Portable Power Station Specifications

Basic Specifications	Capacity	1228Wh	NW	18Kg
	Size	403*223*298mm(L*W*H)	Cell Phone APP	Support
	Certificates & Reports	CE/FCC/PSE/RoHS/UKCA/UL 2743		
Output	Max.Power	100W/300W/500W/800W/1000W/2000W/5000W	Type-A Ports*2	DC5V, 12W(max)
	Type-A Fast Charging Ports*2	DC5V, DC9V, DC12V, QC3.0, 30W(max)		
	Type-C Ports*2	DC5V, DC9V, DC12V, DC15M, DC20V, PD3.0,100W(max)		
	Cigar Lighter	136W, 13.6V DC, 10A(max)	DC 5521	13.6V DC,10A(max)
	Inverter AC*2	Pure sine wave, Rated power 1200W, Peak 2400W, 90~264Vac(50Hz/60Hz) Intelligent inverter system support 1200-2400W Load		
Input	Car Charging	12V/24V DC,10A(max), 200W(max)		
	PV Charging	11-65V DC, 10A(max)	AC Charging	1000W(max), 90~264V ac(50Hz/60Hz)
Battery	Battery Type	Lithium Iron 51.2V 24AH	Type-A Ports*2	DC5V, 12W(max)
	Charging T. (°C)	0°C-45°C±3°C	Discharging T. (°C)	-20°C~50°C±3°C

## USAGE SCENARIO



**LITHIUM MOVABLE CAR CHARGER** SERIES

# MOBILE ENERGY STORAGE GENERATOR

(Trolley-style design)

The 5KW/5kwh mobile energy storage trolley integrates energy storage batteries and hybrid inverters, which is equivalent to a small mobile power station; as a distributed energy storage power source, it can be used for emergency charging of new energy vehicles or for various small and medium-sized vehicles anytime and anywhere. Electrical equipment provides power. Applied to emergency power supply, outdoor work, power emergency repair, mobile auto repair, weak current area power supply system, monitoring power supply system.



## FEATURES



Use high-rate, long-life, high-stability, maintenance-free high-quality lithium battery as the main body of the power source, various performances are better than other main stream brands in the industry.



Built-in intelligent BMS battery management system, comprehensive monitoring of the battery pack system To ensure the reliable operation of the system with high quality requirements, and to support the industry's excellent high-power intelligent AC coupling machine to work together;



The system controls the charging and discharging mode, start-stop, output voltage and output voltage of the AC coupling machine system according to the real-time status of the battery pack system. With output current and other parameters, the product runs efficiently and reliably.

## PARAMETER

Lithium Movable Car Charger Specifications				
PV DC input side	Max. Power	4500W	Max. Current	80A
	Max. Voltage	145V	MPPT Voltage Range	60-115V
	No. of MPPTs/No. of sets that can be connected to each group of MPPTs			1/2
Grid/Charging Pile Charging Parameters	Max. Charging Current	60A	Rated Frequency	50Hz (45-54Hz) /60Hz (55-65Hz)
	Rated Grid Voltage Grid voltage range	110V/220V/230V AC 90-264V AC		
Emergency Power Output	Rated Power	5000W	Rated Voltage	230V AC(110V/220V)
	Rated Frequency	50/60Hz	Response Time	20ms
Energy Storage Battery Parameters	Battery Type	Lithium Iron Phosphate	Capacity	100Ah
	Rated Voltage	51.2V	Voltage Range	40-58.4V
	Max. Charge and Discharge Power	5000W	Max. Charge & Discharge Current	100A
Other Parameters of the System	Capacity	5KWh	N.W.	70Kg
	Size	485*332*630mm(L*W*H)	Cooling Methods	Air Cooled
	Operating T. (°C)	0°C-55°C	Relative Humidity	5-95%, non-condensing

## USAGE SCENARIO

