



## Contact us

GUANGDONG HAPPY TIMES NEW ENERGY CO., LTD

☎ +86-755-21384036

🌐 [www.hte-sz.com](http://www.hte-sz.com)

✉ [info@biwobattery.com](mailto:info@biwobattery.com)

📍 Room 1504,Block A,CIMC,Keneng Road,Dongkeng Community,  
Fenghuang Street,Guangming District,SHENZHEN.



**GUANGDONG HAPPY TIMES NEW ENERGY CO., LTD**

[WWW.HTE-SZ.COM](http://WWW.HTE-SZ.COM)

Striving to be the world's  
leading energy storage  
battery manufacturer

residential ESS battery | all in one ess | commercial ess



## Happy Times

Guangdong Happy Times New Energy Co., Ltd is a professional manufacturer of energy storage systems. It is committed to provide customers with innovative energy storage solutions. Up to now, its main products including wall-mounted energy storage batteries, all-in-one energy storage solutions, high-voltage batteries, etc.

As a new participant in this energy storage battery industry, it puts technological innovation and excellent quality first mind. All the energy storage battery systems are rigorously tested and quality controlled to ensure their stability and durability. In addition, it also provides comprehensive after-sales service and technical support to ensure that all customers achieving excellent experience and value added.

As one manufacturer of committed to promote sustainable energy development, it is actively involved in the energy transition to contribute for building a clean, low-carbon future. It warmly welcomes the cooperation of customers around the world to open a new chapter in the field of energy storage systems.

## Group background

Established on 2 May, 2011, BIWO New Energy is a manufacturer and sales of polymer lithium-ion batteries, lithium-ion battery packs for energy storage. The company currently has four wholly-owned production bases as below and the total area more than 300,000 square meters

I. Guangdong BIWO New Energy Co.,Ltd

II. Hunan Happy Times New Energy Co.,Ltd

III. Guizhou Happy Times New Energy Co.,Ltd

IV. Jiangxi BIWO New Energy Co.,Ltd

The company set up a global marketing center as Guangdong Happy Times New Energy Co.,Ltd. in Shenzhen city. Our equipment is currently in the leading position in the battery industry and with a number of first-class brands in the different industry to maintain long-term stable strategic cooperation of all customers both in domestic and global.

The company has won the unanimous approval and reputation from all the customers.



**13+**

Focusing on energy storage battery industry for 13 years



**100+**

Projects are located in 100 countries



**300000+**

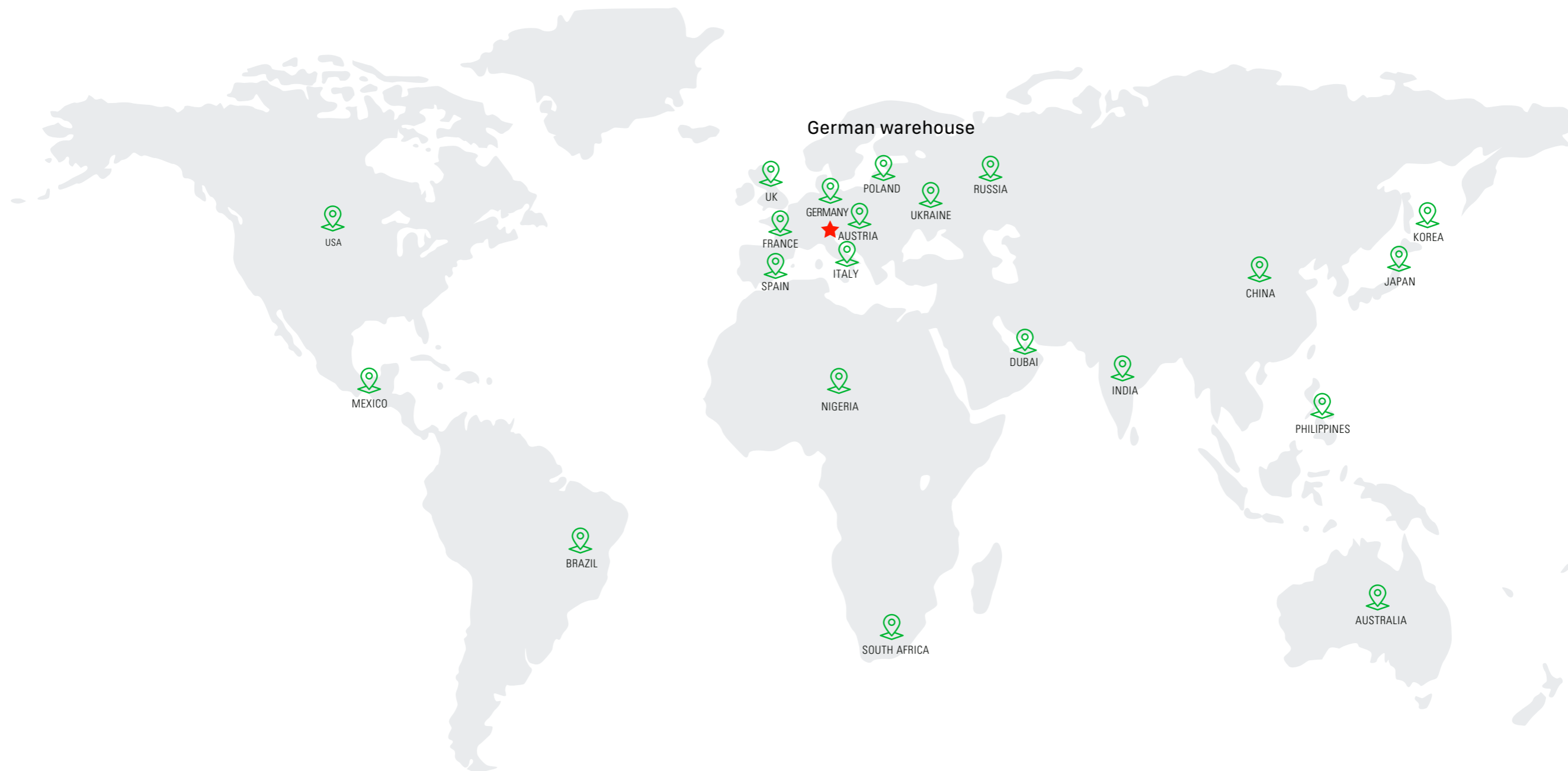
Factory area of 300,000 square meters



**1500+**

1500+ employees

# Marketing Layout



# Technology Honors



- National-level Specialized Small Giant Enterprise
- National High-tech Enterprise
- Dongguan Multiplier Enterprise
- Advanced Enterprise of Innovation-driven Work
- China Electronic Chamber of Commerce Electronic Cigarette Industry Committee director unit
- Member of China Security Industry Association

# Technology And R&D

## Patent

50+ national patent applications Among them, more than 30 patents have been granted in the field of energy storage and microgrid

## Industry Standards

Leading and participating in the development of more than 10 industry standards

## R&D

Independent research and development of high life, high safety and more stable energy storage battery cells Continuous R&D investment (Since 2011, the total investment has reached 2 billion yuan)



# Manufacturing Capacity

## Strict production process

The whole chain integrated manufacturing mode based on equipment and system interconnection as the core We have built a typical production process including segment selection, assembly, testing, etc

## Real-time operational monitoring

Use the perfect equipment management system (MMS) for data collection, monitoring and analysis, through the Real-time data on the efficiency of each equipment, the whole line and the status of the equipment to monitor the operation in real time

## Total Quality Control Strategy

Ultimate safety design, comprehensive quality control system, continuous improvement, continuous value creation for customers

## Reliable Delivery Guarantee

Management system certification, quality system assurance, quality information system



# Residential Energy Storage System

Maximize the use of clean, economical energy, so that your home enjoys an uninterrupted supply of electricity around the clock. With safe performance and first-class quality, we bring intelligent electricity solutions to every household user.



Flexible



Economic



Smart



Clean



Reliable



# Residential Energy Storage System

Suitable for demand of family and farm scene



Wall Mounted Series



Stacked Series  
(High Voltage)



Cabinet Series



Floor Standing Series



Lead Acid  
Replacement Series



Portable Outdoor Series



# Wall-mounted Battery

51.2V 100Ah/150Ah/200Ah

- Lithium Iron Phosphate LiFePO4, 6000 cycles long lifespan



## Technical Parameters

Model	HTE-W51100	HTE-W51200
Nominal Voltage	48 V/51.2V	48V/51.2 V
Typical Capacity	100 Ah	200 Ah
Rated Energy(KWH)	4.8kWh/5.12kWh	9.6kWh/10.24kWh
Dimension (W/D/H)(mm)	640*440*175 mm	850*580*175 mm
Pack Model	16S1P	16S1P
Charge Voltage	58.4V	58.4 V
Standard Charge Current	100 A	100 A
Max. Charge Current	100 A	150 A
Discharge Cut-Off Voltage	44 V	44 V
Standard Discharge Current	50 A	100 A
Max. Discharge Current	100 A	150 A
Communication Interface	Can/RS485/RS232	Can/RS485/RS232
Dial Switch	4-Bit	4-Bit
Parallel Packs	15 Groups	15 Groups
Approximate Weight	≈48 kg	≈100kg
Cycle Life	6000 Cycles	6000 Cycles
Operating Environment	Charge: 0°C~45°C / Discharge: -20°C ~60°C (RH10%~90% Non-condensing)	
Storage Condition	15°C~25°C: 180 days / 0°C~35°C: 90 days / -20°C~45°C: 30 days (RH10%~90% Non-condensing)	



## Technical Advantages

- Ultra thin wall-mounted design, beautiful and atmospheric, perfectly integrated into home environment
- Vehicle level BMS system with protection functions such as overcharge, overdischarge, overcurrent, high and low temperature etc
- Equipped with LED screen to display voltage, current, temperature and other information, convenient for users to check
- Support up to 15 groups of battery parallel to meet with high power demands

# Stackable Energy Storage

200Ah 300Ah 400Ah 500Ah 600Ah

- Modular design, can be stacked arbitrarily to increase capacity



## Technical Parameters

Model	HTE-S51300	HTE-S51400	HTE-S51500	HTE-S51600
Nominal Voltage	51.2 V	51.2 V	51.2 V	51.2 V
Typical Capacity	300 Ah	400 Ah	500 Ah	600 Ah
Rated Energy(KWH)	15.36kWh	20.48kWh	25.6kWh	30.72kWh
Dimension (W/D/H)(mm)	650*600*750 mm	650*600*900mm	650*600*1050 mm	650*600*1200 mm
Pack Model	16S1P*3	16S1P*4	16S1P*5	16S1P*6
Charge Voltage	58.4 V	58.4 V	58.4 V	58.4 V
Standard Charge Current	150 A	200 A	250 A	250 A
Max. Charge Current	300 A	400 A	500 A	500 A
Discharge Cut-Off Voltage	44.0 V	44.0 V	44.0 V	41.2 V
Standard Discharge Current	150 A	200 A	250 A	250 A
Max. Discharge Current	300 A	400 A	500 A	500 A
Communication Interface	Can/RS485/RS232	Can/RS485/RS232	Can/RS485/RS232	Can/RS485/RS232
Dial Switch	4-Bit	4-Bit	4-Bit	4-Bit
Max Stack Quantity	8	8	8	8
Approximate Weight	≈180 kg	≈235 kg	≈290kg	≈345 kg
Cycle Life	6000 Cycles	6000 Cycles	6000 Cycles	6000 Cycles
Operating Environment	Charge: 0°C~45°C / Discharge: -20°C ~60°C (RH10%~90% Non-condensing )			
Storage Condition	15°C~25°C: 180 days / 0°C~35°C: 90 days / -20°C~45°C: 30 daysRH10%~90% Non-condensing )			

## Technical Advantages

- Long life iron phosphate carp battery and excellent product design, ensuring a long service life
- Fully modular design, the number of modules can be increased or decreased at any time, easy to maintain and expand the capacity
- Multiple communications including RS485, CAN, PLUG & PLAY Convenient and flexible
- Designed for residential use, with quick product status display and automated intelligent management, no manual operation required



# High-voltage stacked Energy storage battery

200V 300V 400V 500V

■ 5.12kWh modular designscalable From 12.24 to 25.6 kWh



## Technical Parameters

Model	HTE-HV-10KW	HTE-HV-15KW	HTE-HV-20KW	HTE-HV-25KW
Nominal Voltage	204.8V(64series]	307.2V(96series)	409.6V(128series]	512V(160series)
Cell modelyconfiguration	3.2V 50Ah(ANC)/32S1P			
Capacity(Ah)	50AH			
Rated Energy(KWH)	5.12KWH			
Max.Charge/DischargeCurrentA	25A /50A			
Voltage Range(Vdc)	180-228V	270-340V	350-450V	440-560V
Scalability	Up to 3 parallel			
Communieation	RS232-PC,RS485-Inverter,Canbus-Inverter2			
Cycle Life	6000cycles@25C, 90% DOD, 60%EOL			
Design Life	≥15 Years(25 C)			
Weight(Approx)(KG)	Approx:130kg	Approx:180kg	Approx:230kg	Approx:280kg
Dimension (W/D/H)(mm)	630*185*950 mm	630*185*1290mm	630*185*1640 mm	630*185*1980mm
Installation Mode	Stack			
IP Grade	IP65			
Safety(Pack)	UN38.3.MSDSCE-EMC			
Safety(Cell)	UN38.3.MSDS.IEC62619.CE			
Protection	BMS, Breaker			
Operating Temperature('C)	Charge:-10C-50;Discharge: -20C-50C			
Altitude (m)	<2000			
Humidity	<95%(Non-condensing)			

## High Voltage Series

24-hour uninterrupted power supply for homes

5kWh | 10kWh | 15kWh | 20kWh | 25kWh



# Rack-mounted Battery Module

100Ah 150Ah 200Ah

Multi-module serial and parallel, 6000 cycles long lifespan



## Technical Parameters

Model	HTE-U51100	HTE-U51150	HTE-U51200
Nominal Voltage	48V/51.2 V	48V/51.2 V	48V/51.2 V
Typical Capacity	100 Ah	150 Ah	200 Ah
Rated Energy(KWH)	4.8kWh/5.12kWh	7.2kWh/7.68kWh	9.6kWh/10.24kWh
Dimension (W/D/H)(mm)	520*440*155 mm	520*440*222mm	580*440*244 mm
Pack Model	16S1P	16S1P	16S1P
Charge Voltage	58.4 V	58.4 V	58.4 V
Standard Charge Current	50 A	75 A	100 A
Max. Charge Current	100 A	150 A	200 A
Discharge Cut-Off Voltage	44.0 V	44.0 V	44.0 V
Standard Discharge Current	50 A	75 A	100 A
Max. Discharge Current	100 A	150 A	200 A
Communication Interface	Can/RS485/RS232	Can/RS485/RS232	Can/RS485/RS232
Dial Switch	4-Bit	4-Bit	4-Bit
Parallel Packs	15 Groups	15 Groups	15 Groups
Approximate Weight	≈48 kg	≈72 kg	≈96 kg
Cycle Life	6000 Cycles	6000 Cycles	6000 Cycles
Operating Environment	Charge: 0°C~45°C / Discharge: -20°C ~60°C (RH10%~90% Non-condensing)		
Storage Condition	15°C~25°C: 180 days / 0°C~35°C: 90 days / -20°C~45°C: 30 days (RH10%~90% Non-condensing)		

# Floor-mounted energy storage battery



19-20

150Ah 200Ah 280Ah

Vertical and Moveable, Scalable up to 150kWh 15(Parallel)



## Technical Parameters

Model	HTE-F51150	HTE-F51200	HTE-F51280
Nominal Voltage	48V/51.2 V	48V/51.2 V	48V/51.2 V
Typical Capacity	150 Ah	200 Ah	280 Ah
Rated Energy(kWh)	7.2kWh/7.68kWh	9.6kWh/10.24kWh	13.44kWh/14.33kWh
Dimension (W/D/H)(mm)	670*450*220 mm	720*450*260 mm	850*450*260 mm
Pack Model	16S1P	16S1P	16S1P
Charge Voltage	58.4 V	58.4 V	58.4 V
Standard Charge Current	75 A	100 A	100 A
Max. Charge Current	150 A	200 A	200 A
Discharge Cut-Off Voltage	44.0 V	44.0 V	44.0 V
Standard Discharge Current	75 A	100 A	100 A
Max. Discharge Current	150 A	200 A	200 A
Communication Interface	Can/RS485/RS232	Can/RS485/RS232	Can/RS485/RS232
Dial Switch	4-Bit	4-Bit	4-Bit
Parallel Packs	15 Groups	15 Groups	15 Groups
Approximate Weight	≈78 kg	≈105kg	≈152kg
Cycle Life	6000 Cycles	6000 Cycles	6000 Cycles
Operating Environment	Charge: 0°C~45°C / Discharge: -20°C ~60°C (RH10%~90% Non-condensing)		
Storage Condition	15°C~25°C: 180 days / 0°C~35°C: 90 days / -20°C~45°C: 30 days (RH10%~90% Non-condensing)		

# Portable Power Station

1024 Wh 1228Wh 2026Wh 2116Wh

■ 2200W Powerful Output, Fast Charging for Electric Vehicles



## Technical Parameters

Model	2116Wh	2116Wh (with charging gun)
Size	365*210*281mm	365*210*281mm
Net Weight	18.5Kg	18.5Kg
AC Input	Maximum 1650W2 hours full	Maximum 1650W2 hours full
Photovoltaic Charging Input	Maximum 600W	Maximum 600W
Vehicle Charger	13.2Vdc 10A	13.2Vdc 10A
AC Output	(X4)Maximum 2200W Peak Power:4400W	(X4)Maximum 2200W Peak Power:4400W
Charging Gun Output	/	(X1) 2200W max
USB-A Output	(X2)5Vdc2.4A max 12W per port	(X2)5Vdc2.4A max 12W per port
USB-A fast charging	(X2)5/9/12Vdc3A Max 18W per port	(X2)5/9/12Vdc3A Max 18W per port
Type-c Fast Charger	(x2)5/9/12/15Vdc3A20Vdc5A max 100W	(x2)5/9/12/15Vdc3A20Vdc5A max 100W
Car Charger Output	(X1)13.2Vdc 10A	(X1)13.2Vdc 10A
Discharge Temperature	-10-50°C	-10-50°C
Charging Temperature	0-40°C	0-40°C
Storage Temperature	-10°C-45°C	-10°C-45°C
Battery Cell	Iron Phosphate	Iron Phosphate
Certification Standards	CCC/PSE/UN38.3/CE/ FCC/ ROHS	
Management System	BMS, high-temperature protection, low-temperature protection, over-discharge protection, overload protection, short-circuit protection, over-current protection, battery fault protection, etc.	

## Technical Advantages

- Using broken acid iron theory battery, the electric core after pinprick, heat extension, extrusion, drop and other kinds of harsh tests, higher safety; 1200+ cycles
- Fast charging car emergency for electric vehicles (range 10~30km)
- Wireless charging area charging easier and more convenient, intelligent power protection system 8 protection, for the safety of power protection
- Through CCC, PSE, UN38.3, CE, FCC, ROHS and other professional certifications, quality assurance, use more assured

# Lead Acid Replacement

**50Ah** **100Ah** **150Ah** **200Ah**

- Built-in heating film supports low-temperature operation.
- Support series and parallel use.
- High power discharge, maximum support for continuous 1C discharge



## Technical Parameters

Model	HTE-L1250	HTE-L12100	HTE-L12150	HTE-L12200
Nominal Voltage	12.8 V	12.8 V/25.6 V	12.8 V/25.6 V	12.8 V/25.6 V
Typical Capacity	50 Ah	100 Ah	150 Ah	200 Ah
Dimension (W/D/H)(mm)	229*138*208mm	330*172*215mm	345*190*245mm	483*170*240mm
Pack Model	4S1P	4S1P	4S1P	4S1P
Working Voltage Range	10.8~14.6 V	10.8~14.6 V	10.8~14.6 V	10.8~14.6 V
Standard Charge Current	25 A	50 A	75 A	100 A
Max. Charge Current	50 A	100 A	150 A	200 A
Max. Discharge Current	50 A	100 A	150 A	200 A
Peak Discharge Current	75 A / 10 Sec	150 A / 5 Sec	220 A / 5 Sec	300 A / 3 Sec
Polarity Terminal	M6 Brass Nut	M8 Brass Nut	M8 Brass Nut	M8 Brass Nut
Approximate Weight	≈7 kg	≈13 kg	≈20 kg	≈25 kg
Cycle Life	2000 Cycles	2000 Cycles	2000 Cycles	2000 Cycles
IP Grade	IP65	IP65	IP65	IP65
Cooling method	natural cooling	natural cooling	natural cooling	natural cooling
Safety(Cell)	CE.UN38.3.RoHS	CE.UN38.3.RoHS	CE.UN38.3.RoHS	CE.UN38.3.RoHS
Operating Environment	RH10%~90%, Charge: 0°C~45°C / Discharge: -20°C ~60°C			
Storage Condition	RH10%~90%, 15°C~25°C: 180 days / 0°C~35°C: 90 days / -15°C~45°C: 30 days			



# Application



## Australia 15W/15kWh Home Energy Storage Demonstration Project

Locally in Brisbane, as electricity purchase price is relatively high and the price of feeding into grid is relatively low, install a self-consumption operated home energy storage system can maximize the advantage of ESS and minimize the electricity bill accordingly.

## 10kW/30kWh Photovoltaic Energy Storage Project in Malate Church, Philippines

This energy storage system provides local churches with power support for daily church activities, solves the problem of photovoltaic residual power feed to grid, and achieves maximum self-consumption.



## USA 16KW/20KWH Home Energy Storage PV Project

Inverter + battery all in one solution, to meet customer installation, realize plug and play, and provide new ideas for home storage products.

## UK 10kW/15kWh Hybrid Residential Energy Storage

The project belongs to the science and technology project of Heyuan Power Supply Bureau. The project is mainly used at the end of rural power grid to develop the optical storage microgrid energy management terminal for low-voltage users to improve the reliability of power supply at the end of rural power grid.



## Germany 9kW/15kWh Home Energy Storage Project

Add 3kW/5kWh home energy storage system on the existed 3kW PV system, to maximize the self-consumption and to save the electricity bill respectively. It can also be used as backup power to improve power supply stability of the system.

## Swedish 12kW/15kWh Residential Energy Storage

With the flexible single-phase balancing technology of Swedish FA inverter, it serves the household electricity, aiming to improve power quality and reduce user electricity expenses.



# Major Partners

## Collaborative innovation of energy storage ecological industry chain

We uphold the open and cooperative mentality, collaborative innovation, the pursuit of a win-win industrial chain, leading the industry development; We pursue win-win, respect intellectual property rights, and hope to make progress together with industrial chain partners.







### **Quality Policy**

The company takes quality management, customer-oriented, excellence and continuous improvement as its quality policy.

### **Business Vision**

To become a global first-class green energy enterprise and create a better life for mankind as our management vision.

### **Management Mission**

To pursue the common progress of the company's development and employees' career, and to contribute to the energy construction of China as the management mission.

### **Values**

The values are innovation, honesty and trustworthiness, truthfulness and pragmatism, optimism, excellence and the pursuit of first-class.

### **Business Philosophy**

Quality makes the brand, service makes the value, management makes the market, integrity makes the future as the business philosophy.

### **Employment philosophy**

The employment philosophy is morality first, professionalism, passionate and enterprising, and the pursuit of excellence.