



# Pursue A Green Life

Shenzhen Polinovel Tech Co., Ltd



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# About Polinovel

## Who We Are

Polinovel is an innovative company integrating the design, development, manufacturing, and sales of lithium batteries in China, committed to providing professional, safe, and reliable clean energy solutions and services worldwide.

**2006**

Established

**10000**<sub>m2</sub>

Floorspace

**50+**

R&D Engineers

**80%**

Export Coverage

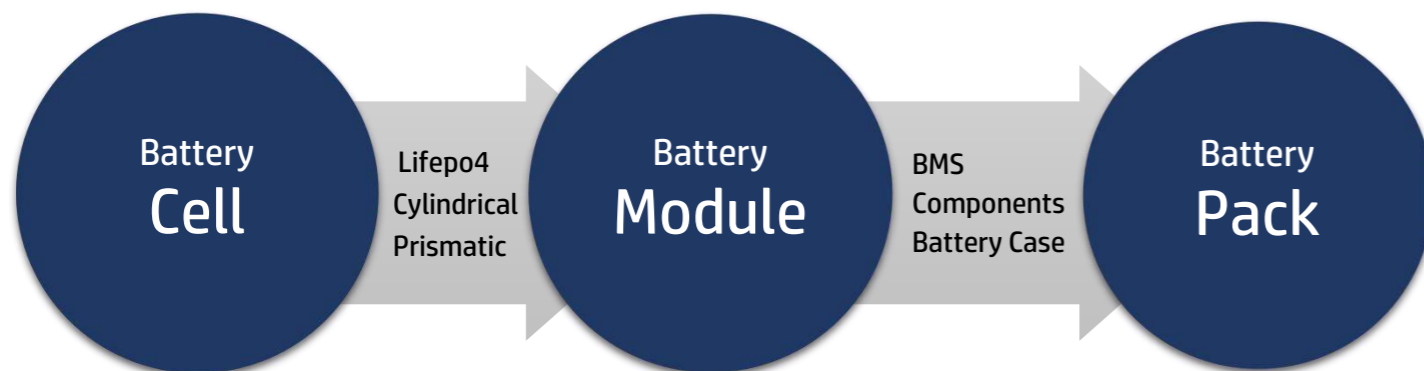


### ◆ Electric Vehicles

Provide lithium battery products and services for electric vehicles from land to sea.

### ◆ Energy Storage Systems

Provide lithium battery solutions and services for clean energy storage systems.



### Material

Innovation in material and chemistry

### Technology

Intelligent technology innovation



### Design

Structure design innovation

### Manufacturing

Exquisite manufacturing innovation

# R&D Capability



**100%**  
Proprietary  
Technology

**50+**  
R&D Engineers

Continuous research in materials, structure design, production process, and product innovation to provide customers with market-oriented reliable lithium batteries and solutions comprehensively enhance the core competitiveness.



Material



Structure Design



Production Process

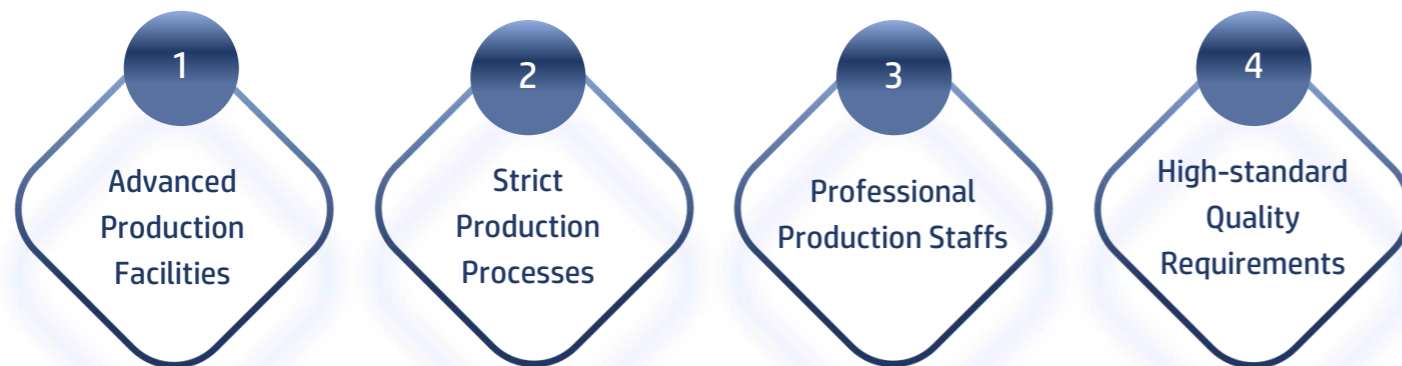


Product Innovation

# Quality Assurance

## ◆ Exquisite Manufacturing

Compliance rate of battery pack reaches 100%.



## ◆ Comprehensive Testing

### Multi-Level Testing

Materials, Cells, Modules, BMS, Packs

### Multi Dimensional Testing

Structure, Craft, Electrical Performance, Safety

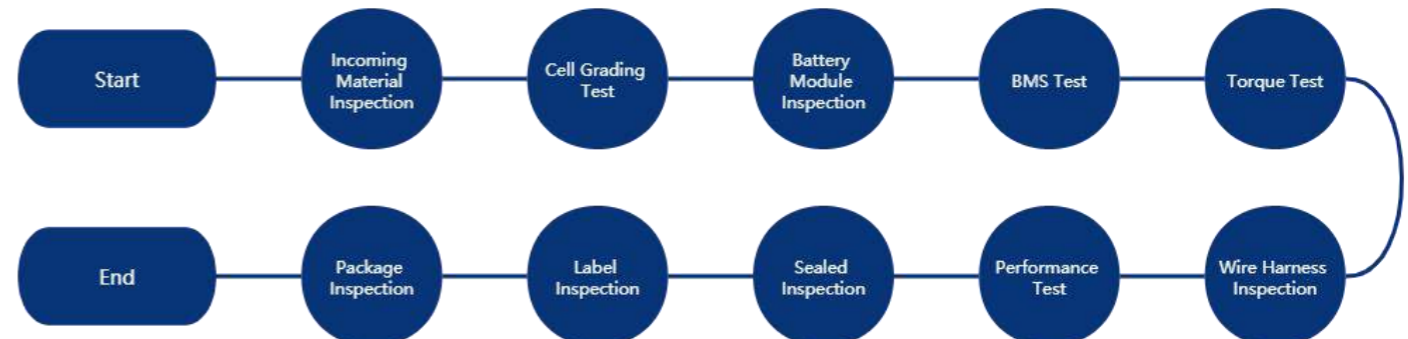
### International Standards

Comply with international industry ISO, GB/T, CE, MSDS, UN38.3 standards



## ◆ Quality Control System

From incoming materials and production to delivery, the whole process contains 10 rounds of inspection and testing to ensure battery quality.



## ◆ International Certifications



ISO9001



ISO14001



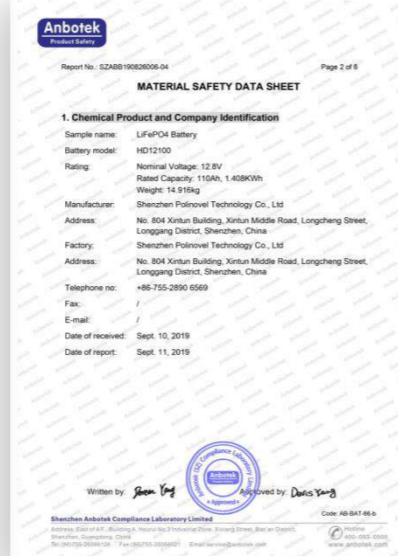
ISO45001



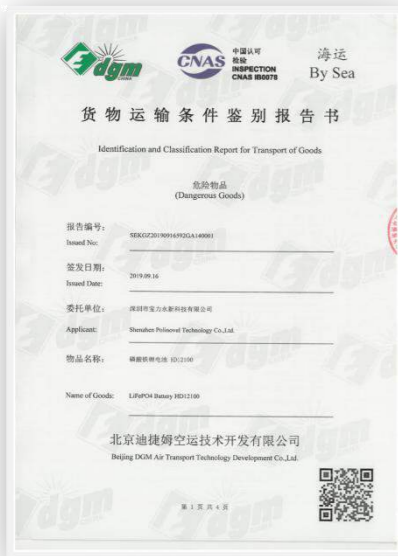
CE



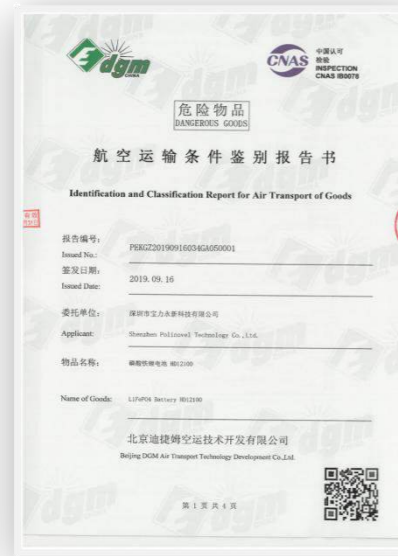
E-mark



MSDS



UN38.3-Sea



UN38.3-Air



Insurance

## Competitiveness

### ◆ Safety And Reliability

From incoming materials and production to delivery, the whole process contains 10 rounds of inspection and testing to ensure battery quality.



Material Safety



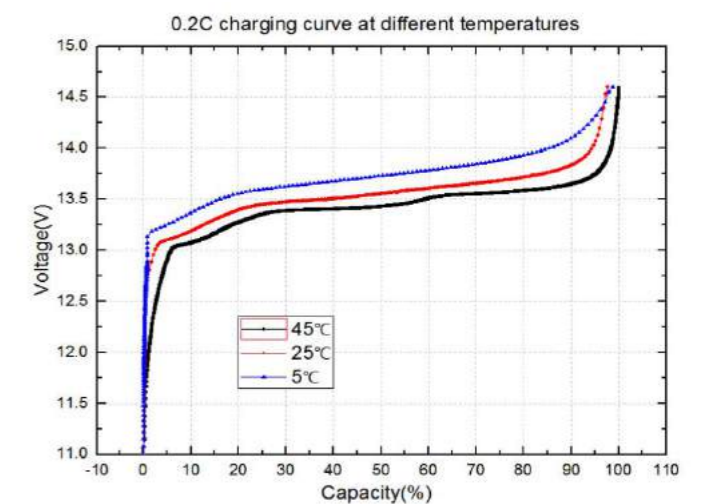
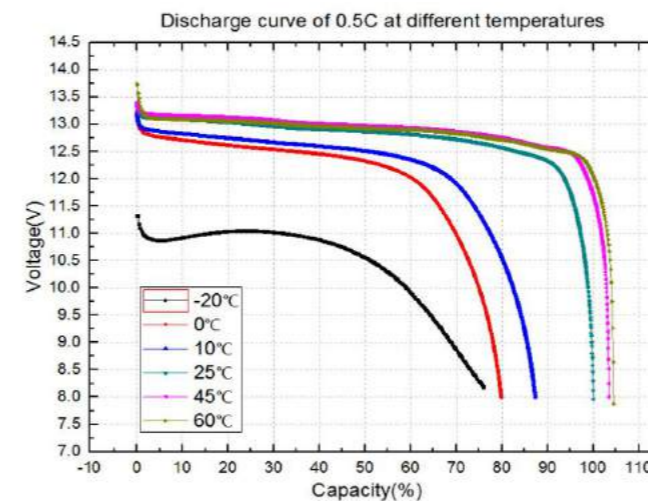
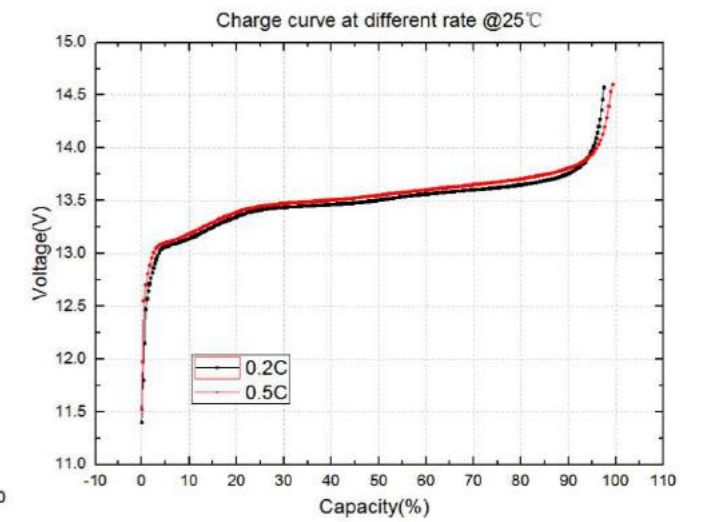
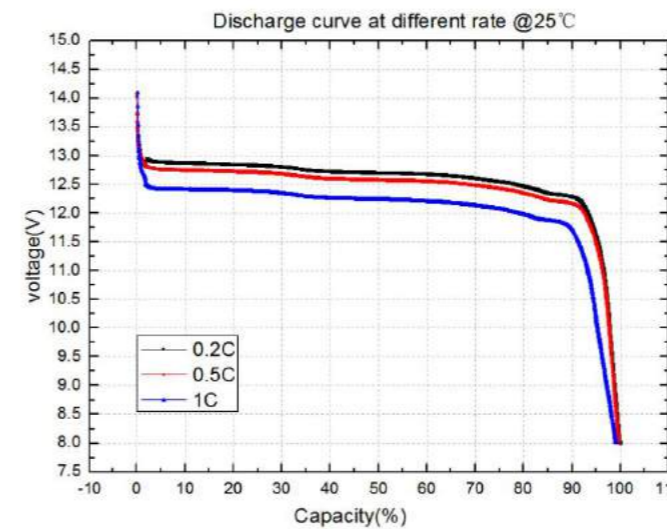
System Safety



Electrical Safety

### ◆ Long Service Life

Provide lithium batteries that deliver high performance, maximum usable energy, and long service life of 10+ years.



## ◆ Innovative Technology

Polinovel successfully developed Bluetooth monitoring, self-heated function, RS232, RS485, CANbus, WiFi, and GPRS communication technology on lithium batteries and stay at the forefront of market trends.



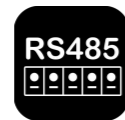
LCD Display



Bluetooth



Self-heated



RS485



CANbus



WiFi



GPRS

## ◆ Flexible Application

Polinovel lithium battery solutions are suitable for various scenarios such as camping, fishing, sailing, short-distance riding, material handling, floor cleaning, and residential power supply.



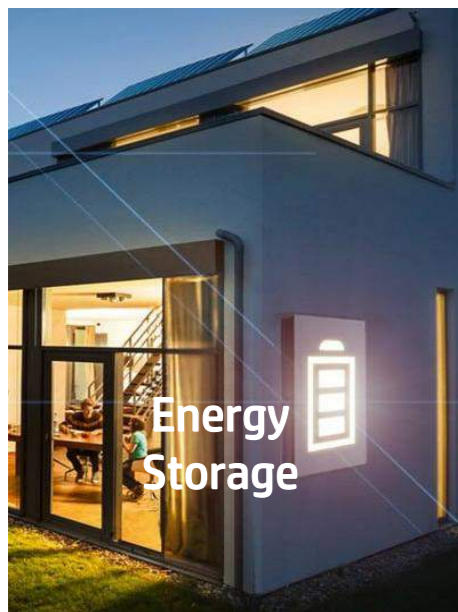
RV Trailer



Marine Boat



Golf Cart



Energy Storage



Forklift



Floor Scrubber

## Five Star Service From Start To Finish

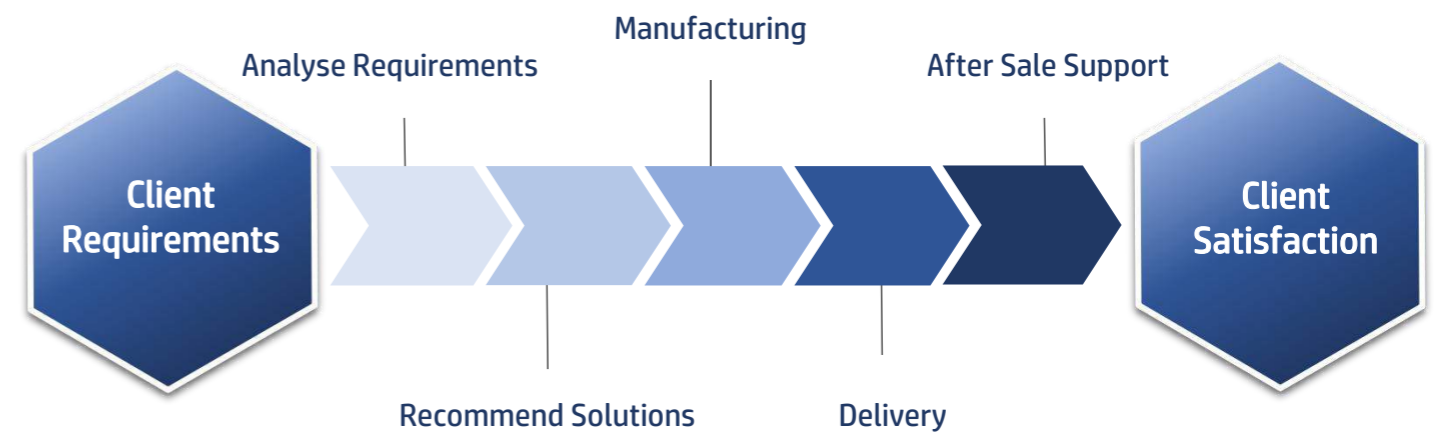


◆ Professional

◆ Efficient

◆ Comprehensive

Polinovel maintain a customer-centric service attitude whenever and wherever we can. We firmly believe that providing customers with good products and services to help customers succeed is the surest way to achieve win-win cooperation in the long term.



### Pre-sale Service

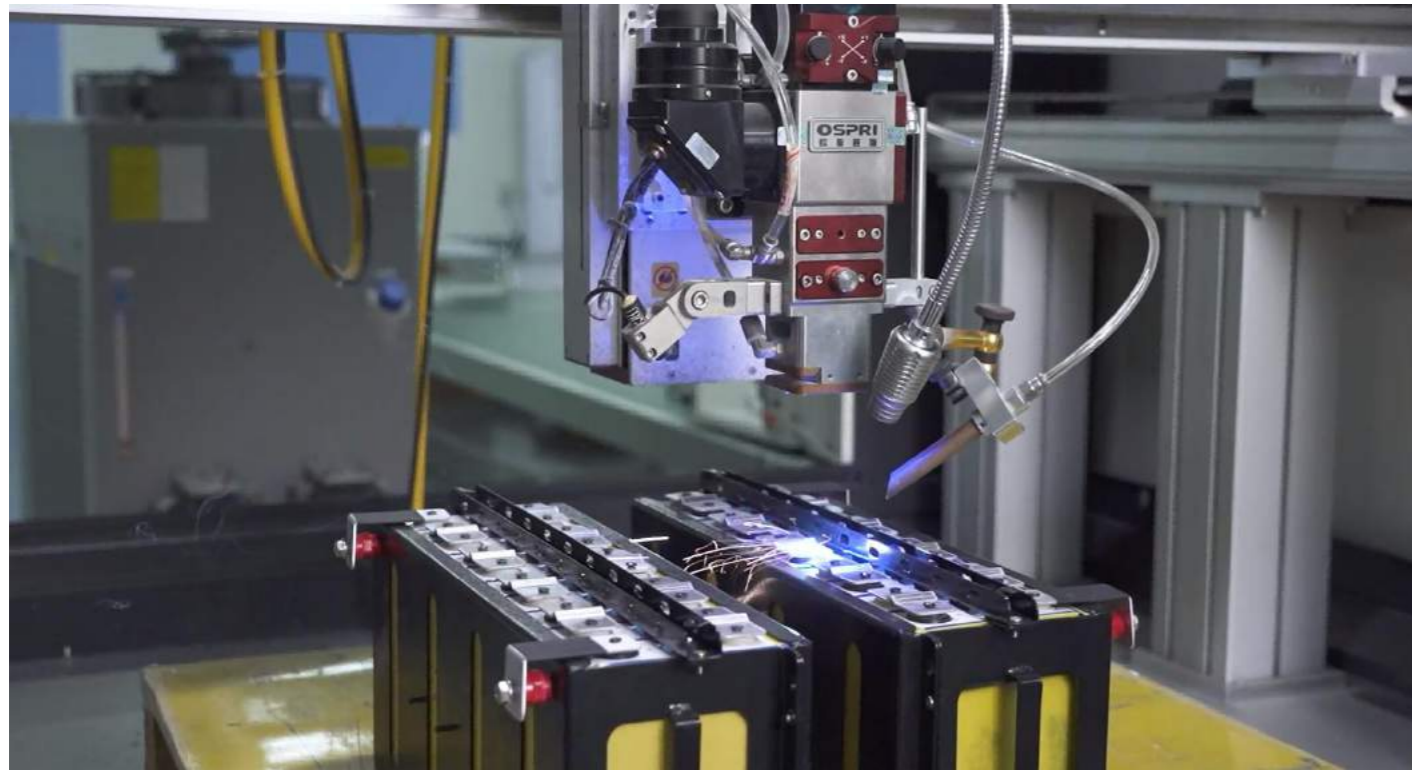
Project manager and engineers work with the customers to create the most feasible lithium battery solutions.

### Sales Service

Technical engineers follow up on the production, debugging, assembly, and testing processes to ensure the quality of inspection.

### After-sale Service

Experienced service team provides 7x24 online technical support and guidance to give quick response on battery use, maintenance and repair questions.

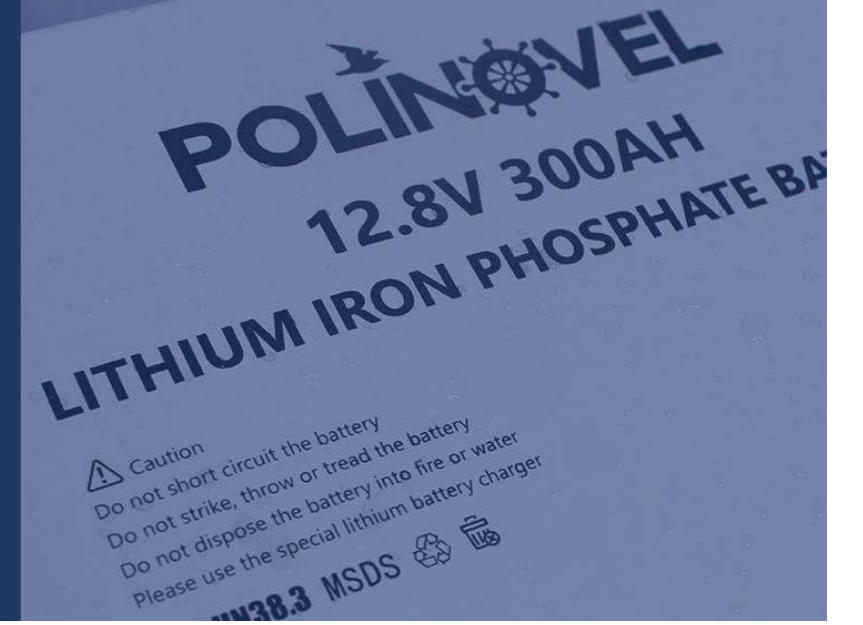


## Exquisite Customization

With extensive experience in lithium batteries, Polinovel understands customers and market requirements well, and provides satisfactory solutions.

What Can Be Customized?

- ① Voltage
- ② Capacity
- ③ Discharge Current
- ④ Dimension
- ⑤ Communication

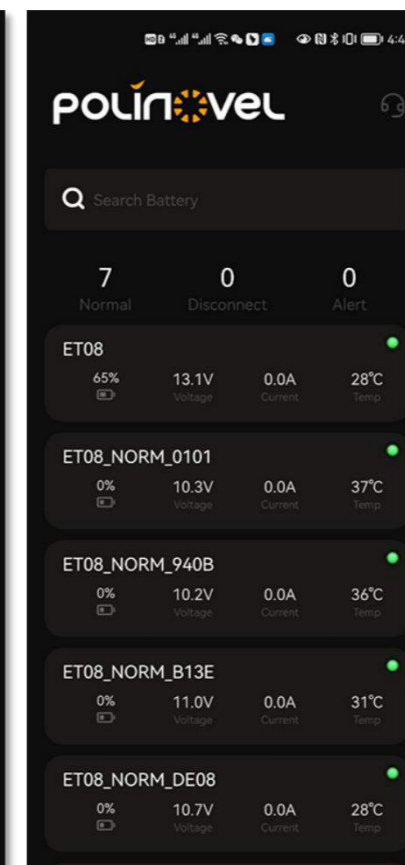


## Trusted Lithium Batteries You Can Count On

Lithium batteries have replaced lead-acid batteries becoming the mainstream battery in the industry. Polinovel develops and manufactures lithium electric vehicle batteries and lithium energy storage batteries for various applications, like RV, marine, golf cart, forklift, floor scrubber, AGV, and household energy storage systems, helping to optimize the energy structure and reduce the cost of energy use.



Bluetooth Monitor APP



LCD Indicator



Custom Label





## BL Series | Bluetooth Lithium Battery

Polinovel BL series smart lithium iron phosphate (Lifepo4) battery with Bluetooth is designed for drop-in replacement of deep cycle lead acid batteries with the standard BCI group size. It offers excellent cycle life, lighter weight, more usable energy, and superior performance. The BMS with Bluetooth technology enables you to check the battery's real-time working status and turn on/off the discharge remotely on your phone.

### Key Features

Monitor battery status on your phone

Remotely control battery power on-off

View multiple batteries at once

BT5.0 operate in greater distance >10m

IP65 waterproof suitable for outdoor scenarios

Support series or parallel connection

Model	Nominal Voltage	Nominal Capacity	Energy	Recommened Charge Voltage	Discharge Cut-off Voltage	Max. Charge Current	Max. Constant Discharge Current	Dimension (L*W*H) mm/in	Weight kg/lbs	Qty/20GP pcs	Qty/40GP pcs
BL1254	12.8V	54Ah	691Wh	14.6V	10V	50A	50A	231*145*211 9.1*5.7*8.3"	8kg/18lbs	1200	2400
BL12100	12.8V	100Ah	1280Wh	14.6V	10V	100A	100A	329*172*214 13*6.8*8.4"	14.3kg/32lbs	720	1440
BL12150	12.8V	150Ah	1920Wh	14.6V	10V	100A	150A	485*170*220 19.1*6.7*8.7"	20kg/44lbs	480	960
BL12200	12.8V	200Ah	2560Wh	14.6V	10V	100A	200A	522*240*218 20.6*9.4*8.6"	27kg/60lbs	360	720
BL12300	12.8V	300Ah	3840Wh	14.6V	10V	100A	200A	522*269*218 20.6*10.6*8.6"	35kg/77lbs	360	690
BL12400	12.8V	400Ah	5120Wh	14.6V	10V	100A	200A	522*269*218 20.6*10.6*8.6"	43kg/95lbs	360	550
BL12450	12.8V	450Ah	5760Wh	14.6V	10V	100A	200A	640*245*220 25.2*9.6*8.7"	48kg/106lbs	240	480
BL2450	25.6V	50Ah	1280Wh	29.2V	20V	50A	50A	329*172*214 13*6.8*8.4"	14.3kg/32lbs	720	1440
BL24100	25.6V	100Ah	2560Wh	29.2V	20V	100A	100A	522*240*218 20.6*9.4*8.6"	27kg/60lbs	360	720
BL24150	25.6V	150Ah	3840Wh	29.2V	20V	100A	100A	522*269*218 20.6*10.6*8.6"	35kg/77lbs	360	690
BL24200	25.6V	200Ah	5120Wh	29.2V	20V	100A	100A	522*269*218 20.6*10.6*8.6"	43kg/95lbs	360	550
BL3640	38.4V	40Ah	1536Wh	43.8V	30V	40A	40A	329*172*214 13*6.8*8.4"	15kg/33lbs	720	1440
BL3650	38.4V	50Ah	1920Wh	43.8V	30V	50A	50A	485*170*220 19.1*6.7*8.7"	20kg/44lbs	480	960
BL3660	38.4V	60Ah	2304Wh	43.8V	30V	50A	50A	485*170*220 19.1*6.7*8.7"	23kg/51lbs	480	960
BL36100	38.4V	100Ah	3840Wh	43.8V	30V	100A	100A	522*269*218 20.6*10.6*8.6"	35kg/77lbs	360	690

### General Data

Casing Material	ABS
IP Rating	IP65
Battery Type	Lithium Iron Phosphate (LiFePO4)
Self Discharge Per Month	<3%
Charge Temperature	0 to 45 ° C
Discharge Temperature	-20 to 60 ° C
Storage Temperature	0 to 40 ° C

Specifications subject to change without notice, please contact us to get the latest information.





## GOLF Series | Lithium Battery

Polinovel GOLF Series lithium batteries are specially designed to meet the power and energy requirements of golf carts, and utility vehicles. With the features of lightweight, long life, high performance, and zero maintenance, the Golf Series battery allow you to enjoy more mileage, more freedom on or off the green, and save more maintenance cost.

### Key Features

Robust construction designed to endure

Customized size for drop-in installation

Plug-and-play gauge provides real-time SOC

## Battery Specification

Model	Golf36105	Golf4830	Golf4866
Nominal Voltage	38.4V	51.2V	
Nominal Capacity	105Ah	30Ah	66Ah
Energy	4032Wh	1536Wh	3379Wh
Standard Charge Voltage	43.8V	58.4V	
Discharge Cut-off Voltage	30V	40V	
Standard Charge Current	50A	15A	30A
Max. Charge Current	100A	30A	60A
Max. Constant Discharge Current	150A	50A	100A
Peak Discharge Current	320A @30s	100A	220A @30s
Dimension	436*334*243mm 17.2*13.1*9.6in	260*180*245mm 10.2*7.1*9.6in	464*334*243mm 18.3*13.1*9.6in
Weight	40kg/88.2lbs	15.5kg/34.2lbs	40kg/88.2lbs
Qty/20GP/40GP	300pcs/520pcs	900pcs/1500pcs	300pcs/520pcs
Case Material	Metal	Plastic	Metal
Cycle Life	>2500 (1C@ DOD100%); >4000 (0.2C@ DOD100%)		
Temperature	Charge: 0~60°C, Discharge: -20~ 60°C, Storage: 10~ 45°C		

Model	Golf48105	Golf48160	Golf72105
Nominal Voltage	51.2V		73.6V
Nominal Capacity	105Ah	160Ah	105Ah
Energy	5376Wh	8192Wh	7728Wh
Standard Charge Voltage	58.4V		83.95V
Discharge Cut-off Voltage	40V		57.5V
Standard Charge Current	50A		
Max. Charge Current	100A		
Max. Constant Discharge Current	200A		
Peak Discharge Current	420A @30s		
Dimension	520*334*243mm 20.5*13.1*9.6in	860*330*234mm 33.9*13*9.2in	674*334*243mm 26.5*13.1*9.6in
Weight	50kg/110lbs	70kg/154.3lbs	78kg/172lbs
Qty/20GP/40GP	225pcs/410pcs	150pcs/270pcs	170pcs/240pcs
Case Material	Metal		
Cycle Life	>2500 (1C@ DOD100%); >4000 (0.2C@ DOD100%)		
Temperature	Charge: 0~60°C, Discharge: -20~ 60°C, Storage: 10~ 45°C		

Specifications subject to change without notice, please contact us to get the latest information.



## WALL Series | Energy Storage Battery

Polinovel WALL Series is a high-performance lithium battery that utilizes the safe lithium iron phosphate (LiFePO4) technology, works together with the inverter, and stores energy from solar production to provide power for the home, which reduces your electricity reliance on the grid, and the independent backup energy can protect your home from the outage. Its compact design and scalable feature allow for simple installation to suit various home energy needs.

### Key Features

Compact design for easy installation on wall or ground

Scalable battery allows 15 units in parallel connection

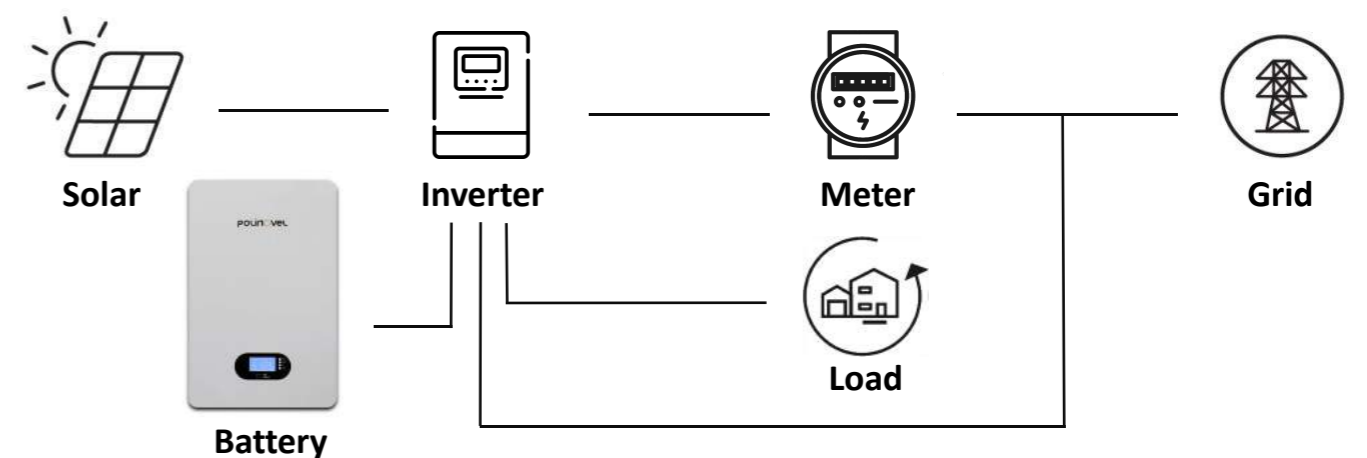
Friendly communication compatible with 20+ inverter brands

## Battery Specification

Model	WALL5	WALL8	WALL10
Nominal Voltage	51.2V		
Nominal Capacity	100Ah	150Ah	200Ah
Energy	5.12kWh	7.68kWh	10.24kWh
Charge Cut-off Voltage	58V		
Discharge Cut-off Voltage	40V		
Standard Charge Current	30A/100A	45A/100A	60A/100A
Max. Charge Current	50A/100A	75A/150A	100A/200A
Max. Constant Discharge Current	150A	200A	200A
Peak Current	200A	300A	300A
Max. Modules in Parallel	15pcs in parallel		
Communication	RS485/RS232/CAN		
Dimension	535*455*145mm 21.1*17.9*5.7in	670*540*170mm 26.4*21.3*6.7in	870*465*145mm 34.3*18.3*5.7in
Weight	49kg/108lbs	72kg/158.7lbs	94kg/207.2lbs
Qty/20GP/40GP	250pcs/420pcs	180pcs/260pcs	140pcs/200pcs
Temperature	Charge: 0~50°C; Discharge: -15~ 60°C		

Specifications subject to change without notice, please contact us to get the latest information.

## System Diagram





## SUPER Series | Energy Storage Battery

Polinovel SUPER Series is a super thin lithium battery that utilizes lithium iron phosphate (LiFePO4) chemistry, secured by self-developed automotive grade BMS technology, that brings reliable performance and safety to your home energy storage system. The slim size suits for wall or ground installation to save more space in the home. The SUPER battery features a touch LCD display screen that allows you to check the battery's working status in real time.

### Key Features

75mm super thin design for save more installation space

Expandable capacity allows 15 units in parallel connection

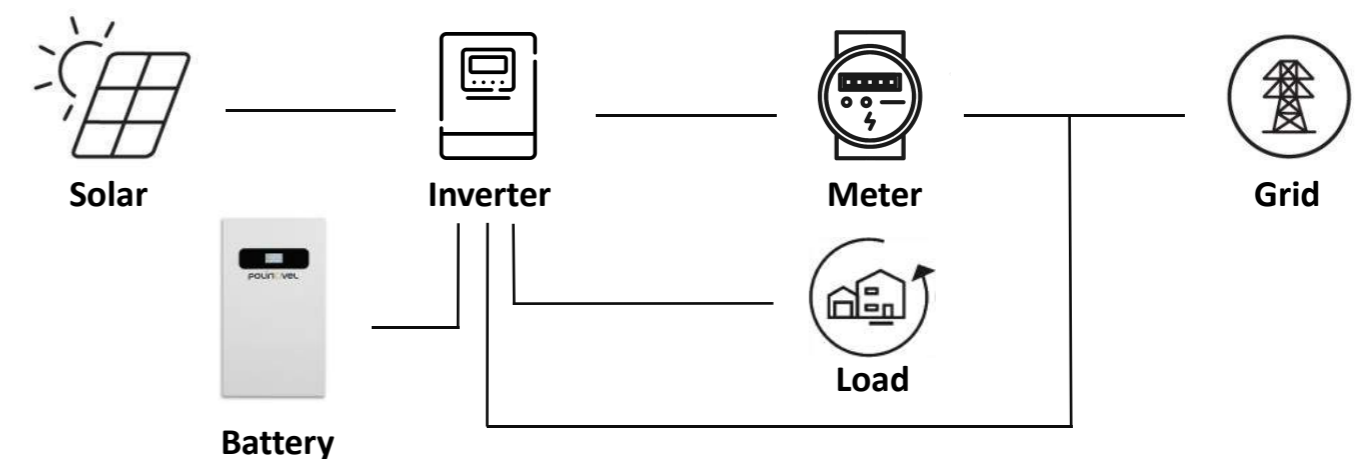
Friendly communication compatible with branded inverters

## Battery Specification

Model	Super5	Super10
Nominal Voltage	51.2V	
Nominal Capacity	100Ah	200Ah
Energy	5.12kWh	10.24kWh
Charge Cut-off Voltage	58.4V	
Discharge Cut-off Voltage	40V	
Charge Current	100A	
Max. Constant Discharge Current	100A	
Max. Modules in Parallel	15pcs in parallel	
Communication	RS485/RS232/CAN	
Dimension (L*H*D)	590*1050*75mm 23.2*41.3*3in	590*1050*150mm 23.2*41.3*5.9in
Weight	50kg/110lbs	100kg/220.5lbs
Qty/20GP/40GP	160pcs/320pcs	110pcs/190pcs
Temperature	Charge: 0~60°C; Discharge: -20~ 60°C; Storage: 0~ 45°C	

Specifications subject to change without notice, please contact us to get the latest information.

### System Diagram





## Battery Specification

Model	Vertical15	Vertical20	Vertical25
Nominal Voltage	51.2V		
Nominal Capacity	300Ah	400Ah	500Ah
Energy	15.36kWh	20.48kWh	25.6kWh
Charge Cut-off Voltage	58V		
Discharge Cut-off Voltage	40V		
Standard Charge Current	100A		
Max. Charge Current	200A		
Max. Constant Discharge Current	200A		
Peak Current	300A		
Communication	RS485/CAN		
Dimension	420*300*900mm 16.5*11.8*35.4in	485*430*1025mm 19.1*16.9*40.4in	420*500*1025mm 16.5*19.7*40.4in
Weight	140kg/309lbs	175kg/386lbs	220kg/485lbs
Qty/20GP/40GP	95pcs/130pcs	44pcs/88pcs	44pcs/85pcs
Temperature	Charge: 0~50°C; Discharge: -15~ 60°C		

Specifications subject to change without notice, please contact us to get the latest information.

## VERTICAL Series | Energy Storage Battery

Polinovel Vertical Series is a high-performance lithium battery that reduces your reliance on the grid by storing solar energy for use when the sun isn't shining or the grid goes down. Use the VERTICAL battery combine with an inverter to power your home during an outage.

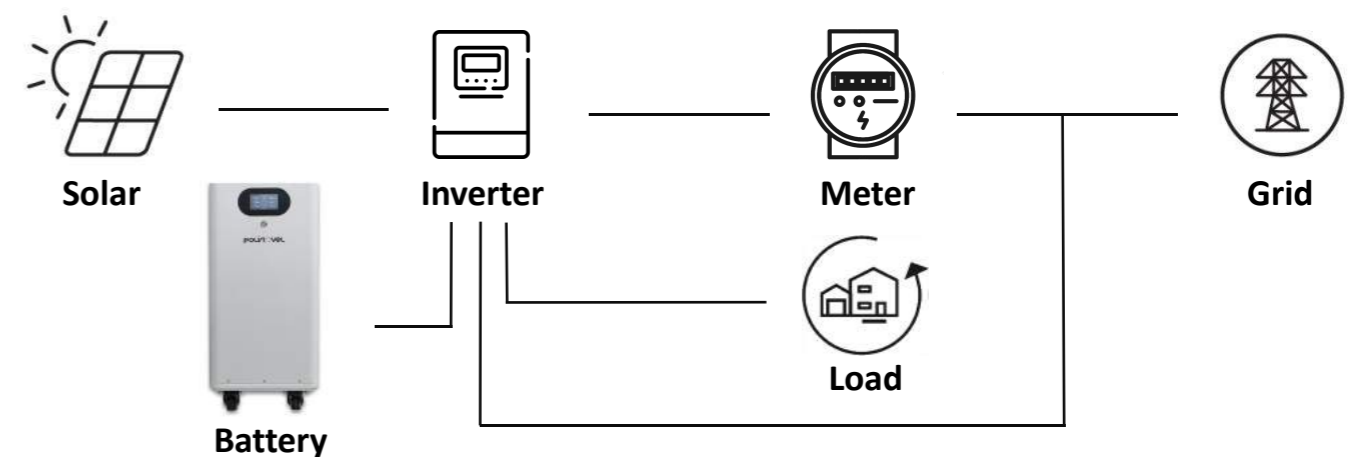
### Key Features

Household design with LCD display

Hidden wires, bottom wheels for simple install moving

Compatible with 20+ inverter brands

### System Diagram





## STK Series | Energy Storage Battery

Polinovel STK Series is a stackable lithium home energy storage battery, that inherits a modular design concept, combined with easy installation, and simple connection, that enables you to customize the solar system to suit any renewable energy needs with ease. The innovative parallel-connection technology, no wiring, no DIP setting required, truly realizes the free battery system combination to save your labor and time during transport and installation.

### Key Features

Stackable modular design for simple installation

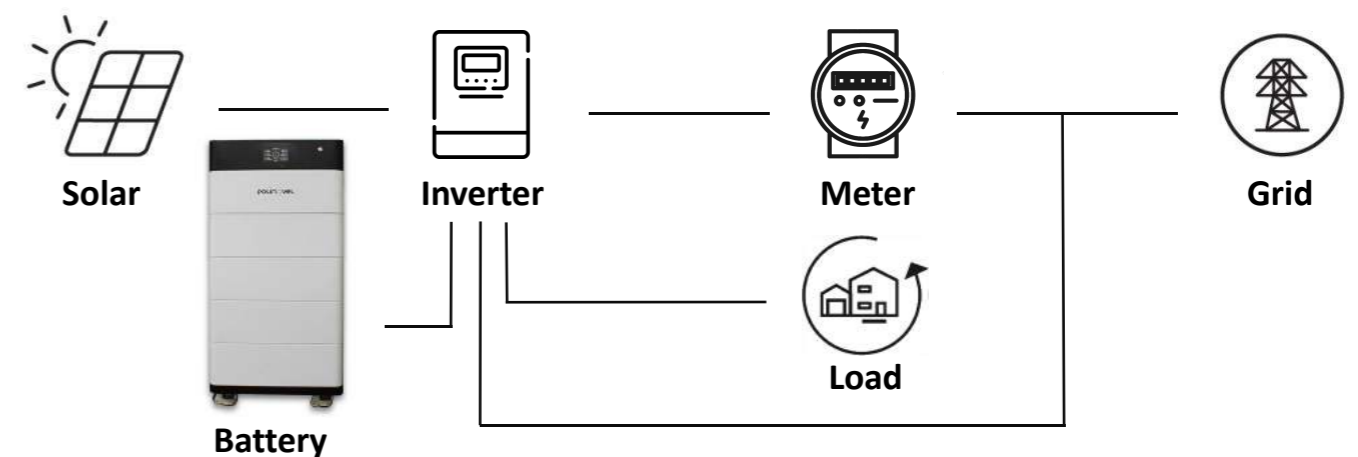
Scalable battery allows 10 units in parallel connection

No wiring and DIP switch realize free system combination

Model	STK10	STK15	STK20	STK25
Nominal Voltage	51.2V			
Nominal Capacity	200Ah	300Ah	400Ah	500Ah
Energy	10.24kWh	15.36kWh	20.48kWh	25.6kWh
Charge Cut-off Voltage	58.4V			
Discharge Cut-off Voltage	40V			
Standard Charge Current	100A	150A	200A	250A
Max. Charge Current	200A	300A	400A	500A
Max. Constant Discharge Current	200A	300A	400A	500A
Peak Current	300A	400A	500A	600A
Communication	RS485/CAN			
Dimension	585*360*458mm 23*14.2*18in	585*360*608mm 23*14.2*23.9in	585*360*758mm 23*14.2*29.8in	585*360*908mm 23*14.2*35.7in
Weight	92kg/202.8lbs	138kg/304.2lbs	184kg/405.7lbs	230kg/507.1lbs
Qty/20G/40GP	157pcs/289pcs	105pcs/192pcs	78pcs/144pcs	63pcs/115pcs
Temperature	Charge: 0~50°C; Discharge: -15~ 60°C			

Specifications subject to change without notice, please contact us to get the latest information.

### System Diagram





## ONE Series | Energy Storage Battery

Polinovel ONE Series is a solar lithium battery system that stores energy from the PV array. ONE has multiple lifepo4 battery modules and a hybrid inverter, that are optimized to work together. Innovative multi-battery parallel technology enables easy installation with no wiring and DIP required. Its integrated and stackable design allows for a simple connection to any home.

### Key Features

Integrated battery, inverter, controller for more compact install

Expandable for demand, free assembly, flexible stacking

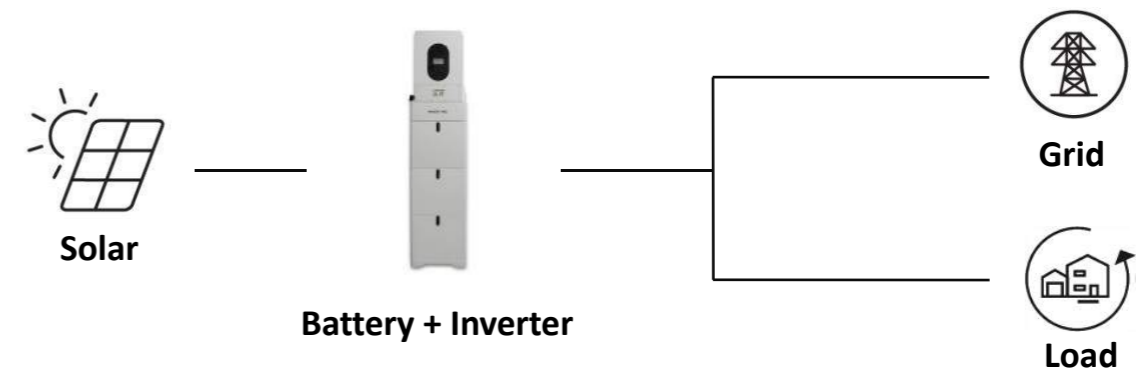
No wiring, no dialing code, automatic protection parallel circulation

## Battery Specification

Battery Module	ONE5	ONE10	ONE15
Nominal Voltage	51.2V		
Nominal Capacity	100Ah	200Ah	300Ah
Energy	5.12kWh	10.24kWh	15.36kWh
Charge Cut-off Voltage	58V		
Discharge Cut-off Voltage	42V		
Standard Charge Current	50A		
Max. Charge Current	100A		
Max. Constant Discharge Current	100A		
Peak Current	200A		
Communication	RS485/CAN		
<b>Inverter</b>			
Power	5KW		
Output Voltage	230VAC		
Frequency	50Hz		
Input Power (PV)	7KW		
Input Voltage Range (PV)	150-500VDC		
Communication Connect Port	RS485/CAN		
<b>System Information</b>			
Case Material	Metal		
Dimension	410*230*1070mm 16.1*9.1*42.1in	410*230*1430mm 16.1*9.1*56.3in	410*230*1790mm 16.1*9.1*70.5in
Weight	70kg/154lbs	115kg/253.5lbs	160kg/352.7lbs
Qty/20GP/40GP	160pcs/320pcs	108pcs/216pcs	82pcs/164pcs
Temperature	Charge: 0~50°C; Discharge: -15~ 60°C		

Specifications subject to change without notice, please contact us to get the latest information.

## System Diagram





## RACK Series | Energy Storage Battery

Polinovel RACK series lithium battery inherits the classic modular design for easy rack installation. It utilizes proven lithium iron phosphate cells with built-in smart BMS, ensuring great safety and high efficiency to store solar energy, bringing seamless backup power to keep your household appliances running during a power outage.

### Key Features

Great compability with branded inverter

Suport 15pcs in parallel connection for power expansion

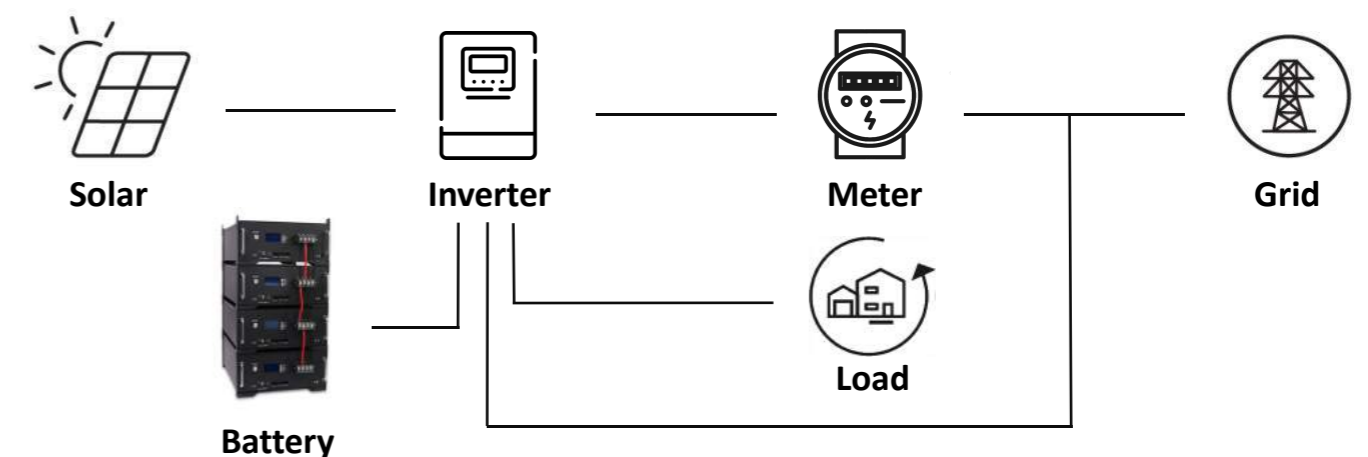
3U, 4U, 5U sizes available

## Battery Specification

Model	RACK4850	RACK48100	RACK48150	RACK48200
Nominal Voltage	51.2V			
Nominal Capacity	50Ah	100Ah	150Ah	200Ah
Energy	2.56kWh	5.12kWh	7.68kWh	10.24kWh
Charge Cut-off Voltage	58.4V			
Discharge Cut-off Voltage	40V			
Max. Charge Current	50A	100A		
Max. Constant Discharge Current	50A	100A	150A	200A
Peak Current	100A	200A	200A	300A
Max. Modules in Parallel	15pcs in parallel			
Communication	RS485/RS232/CAN			
Dimension	442*450*133mm 17.4*17.7*5.2in	442*510*155mm 17.4*20*6.1in	442*400*311mm 17.4*15.7*12.2in	442*680*223mm 17.4*26.8*8.8in
Weight	29kg/64lbs	49.5kg/109lbs	76kg/168lbs	100kg/220lbs
Qty/20GP/40GP	360pcs/720pcs	250pcs/420pcs	175pcs/250pcs	130pcs/190pcs
Temperature	Charge: 0~50°C; Discharge: -15~ 60°C			

Specifications subject to change without notice, please contact us to get the latest information.

### System Diagram





## CABINET Series | Energy Storage Battery

Polinovel Cabinet Series lithium battery is available in capacities of 10kWh, 15kWh, 20kWh, and 25kWh, allowing you to store sufficient solar energy to power your home, significantly reduce dependence on the grid during peak demand time, and keep your home appliance normal running when the grid goes down.

### Key Features

Compact design for easy installation on wall or ground

Scalable battery allows 15 units in parallel connection

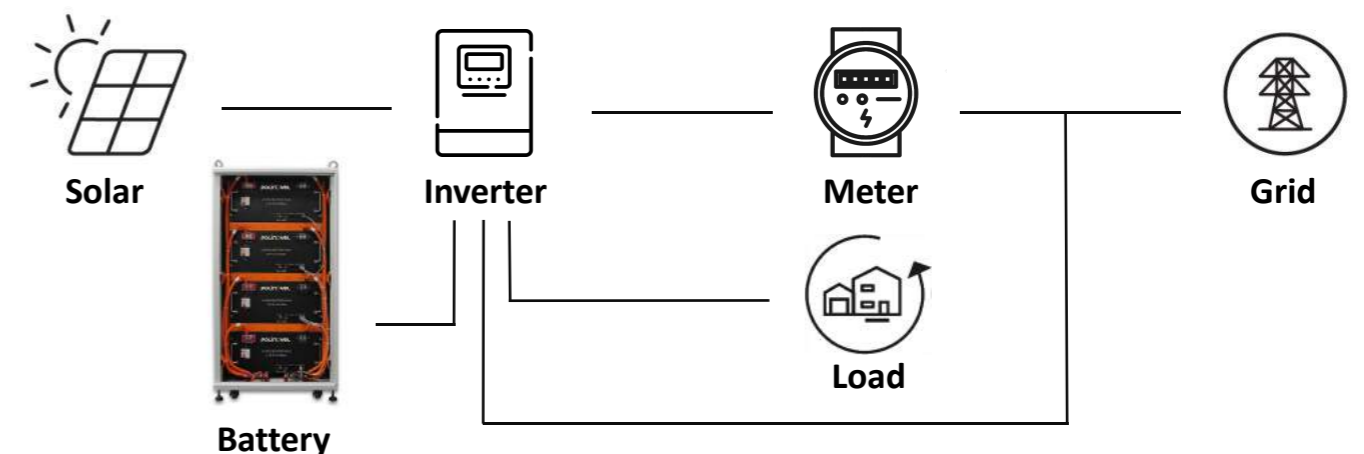
Friendly communication compatible with 20+ inverter brands

## Battery Specification

Model	Cabinet10	Cabinet15	Cabinet20	Cabinet25
Nominal Voltage	51.2V			
Nominal Capacity	200Ah	300Ah	400Ah	500Ah
Energy	10.24kWh	15.36kWh	20.48kWh	25.6kWh
Charge Cut-off Voltage	58V			
Discharge Cut-off Voltage	40V			
Recommended Charge Current	60A	100A	120A	150A
Max. Charge Current	100A	150A	200A	200A
Max. Constant Discharge Current	200A	300A	400A	500A
Peak Current	300A	400A	500A	600A
Max. Modules in Parallel	15pcs in parallel			
Communication	RS485/RS232/CAN			
Dimension (L*W*H)	600*600*720mm 23.6*23.6*28.3in	600*600*987mm 23.6*23.6*38.9in	600*600*1165mm 23.6*23.6*45.9in	600*600*1378mm 23.6*23.6*54.3in
Weight	95kg/209.4lbs	141kg/310.9lbs	187kg/412.3lbs	243kg/535.7lbs
Qty/20GP/40GP	48pcs/96pcs	24pcs/48pcs	24pcs/48pcs	24pcs/48pcs
Temperature	Charge: 0~50°C; Discharge: -15~ 60°C			

Specifications subject to change without notice, please contact us to get the latest information.

### System Diagram







## ES Series | Energy Storage Battery

Polinovel ES series is a 48V lithium iron phosphate battery with superior performance. Compatible with global inverter brands, it can be used for self-consumption and backup applications with a capacity of 10kWh, 15kWh, and 20kWh. Choose this high-efficient battery for your solar energy storage system and use it whenever needed.

### Key Features

Long life, high performance, free maintenance

Flexible customize solution in capacity and size

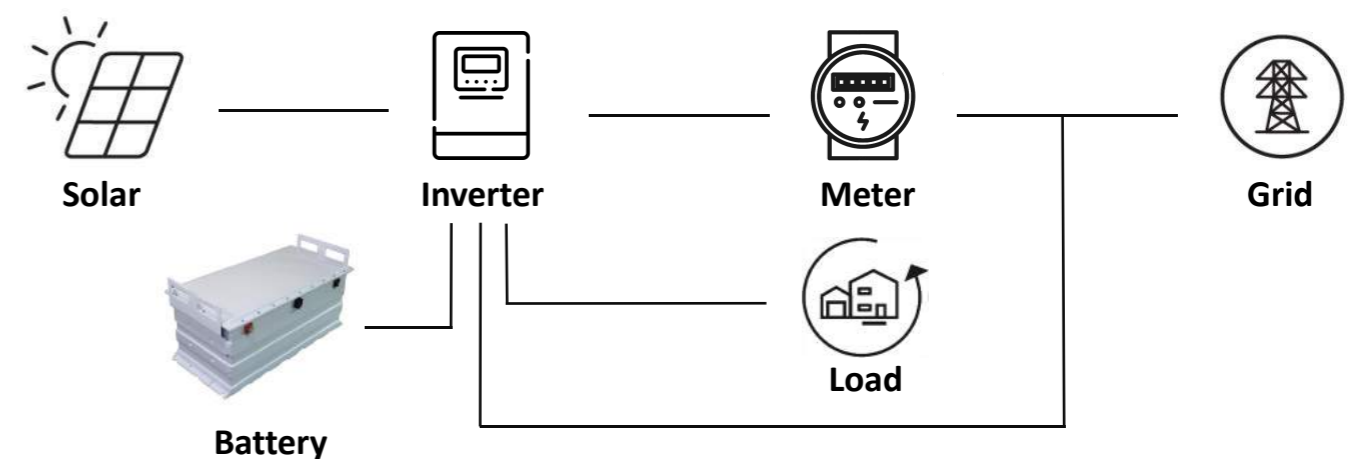
Friendly compatibility with global inverter brands

## Battery Specification

Model	ES48200	ES48300	ES48400
Nominal Voltage	51.2V		
Nominal Capacity	200Ah	300Ah	400Ah
Energy	10.24kWh	15.36kWh	20.48kWh
Charge Cut-off Voltage	58.4V		
Discharge Cut-off Voltage	40V		
Standard Charge Current	40A	60A	80A
Max. Charge Current	100A		
Max. Constant Discharge Current	200A		
Peak Current	400A (<5s)		
Communication	RS485/CAN		
Dimension	840*450*340mm 33.1*17.7*13.4in	840*450*340mm 33.1*17.7*13.4in	927*460*475mm 33.1*17.7*13.4in
Weight	106kg/234lbs	140kg/309lbs	198kg/437lbs
Qty/20GP/40GP	96pcs/180pcs	96pcs/135pcs	60pcs/95pcs
Temperature	Charge: 0~50°C; Discharge: -15~ 60°C		

Specifications subject to change without notice, please contact us to get the latest information.

### System Diagram





## HSTK Series | Energy Storage Battery

Polinovel HSTK Series is a stackable and easily scalable residential energy storage lithium battery system, integrated high-voltage modular with a capacity of 5kWh for a single battery pack, that supports multiple batteries being connected in series to meet different voltage and power needs. The battery system is created at automotive-grade craft, bringing a highly reliable and safe power source to ensure the normal operation of your home appliances.

### Key Features

Flexible voltage expansion for different power demands

Plug-and-play design simplify the connection and installation

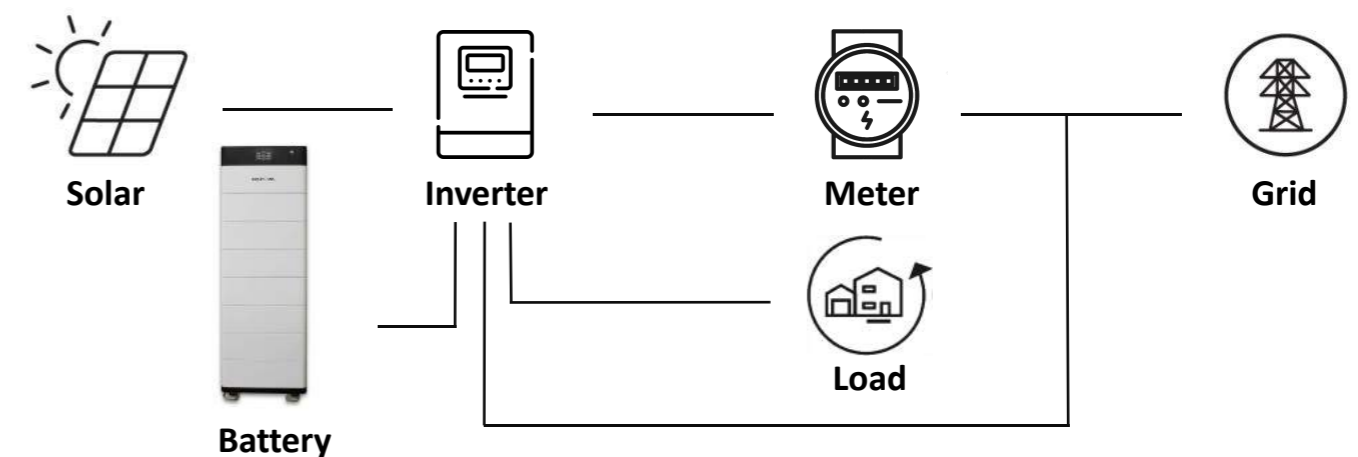
Reliable power for high-voltage residential or light commercial scenes

## Battery Specification

Model	HSTK25	HSTK30	HSTK35	HSTK40
Nominal Voltage	256V	307.2V	358.4V	409.6V
Nominal Capacity	100Ah			
Energy	25.6kWh	30.7kWh	35.8kWh	40.9kWh
Charge Cut-off Voltage	290V	350V	408V	467V
Discharge Cut-off Voltage	212V	254V	296V	340V
Standard Charge Current	50A			
Max. Charge Current	100A			
Max. Constant Discharge Current	100A			
Peak Current	150A			
Communication	RS485/CAN			
Dimension	565*460*1140mm 22.2*18.1*44.9in	565*460*1320mm 22.2*18.1*52in	565*460*1500mm 22.2*18.1*59.1in	565*460*1680mm 22.2*18.1*66.1in
Weight	245kg/540.1lbs	290kg/639.3lbs	340kg/749.6lbs	380kg/837.8lbs
Qty/20GP/40GP	36pcs/72pcs	36pcs/65pcs	36pcs/55pcs	36pcs/50pcs
Temperature	Charge: 0~50°C; Discharge: -15~ 60°C			

Specifications subject to change without notice, please contact us to get the latest information.

## System Diagram





## HV Series | Energy Storage Battery

Polinovel HV Series is a safe energy storage lithium battery system, with voltage optional from 192V to 480V, suited for residential or light commercial buildings that are powered by high voltage. The battery system is created at an automotive-grade craft, bringing a highly reliable power source to ensure the normal operation of the appliances.

### Key Features

High safety and reliability

Automotive-grade quality standard

Support series connection for flexible expansion

## Battery Specification

Model	HV19250	HV192100	HV24050	HV240100
Nominal Voltage	192V		240V	
Nominal Capacity	50Ah	100Ah	50Ah	100Ah
Energy	9.6kWh	19.2kWh	12kWh	24kWh
Charge Cut-off Voltage	218V		200V	
Discharge Cut-off Voltage	160V		270V	
Recommended Charge Current	25A	50A	25A	50A
Max. Charge Current	50A	100A	50A	100A
Max. Constant Discharge Current	50A	100A	50A	100A
Peak Current	100A	200A	100A	200A
Dimension	460*330*480mm 18.1*13*18.9in	600*600*1600mm 23.6*23.6*63in	460*330*640mm 18.1*13*25.2in	1530*600*600mm 60.2*23.6*23.6in
Weight	100kg/220.5lbs	190kg/418.9lbs	170kg/374.8lbs	260kg/573.2lbs
Qty/20GP/40GP	130pcs/190pcs	24pcs/48pcs	75pcs/110pcs	24pcs/48pcs
Communication	RS485/CAN			
Temperature	Charge: Charge Temperature; Discharge: -15~ 60°C			

Model	HV38450	HV384100	HV48050	HV480100
Nominal Voltage	384V		480V	
Nominal Capacity	50Ah	100Ah	50Ah	100Ah
Energy	19.2kWh	38.4kWh	24kWh	48kWh
Charge Cut-off Voltage	435V		545V	
Discharge Cut-off Voltage	320V		400V	
Recommended Charge Current	25A	50A	25A	50A
Max. Charge Current	50A	100A	50A	100A
Max. Constant Discharge Current	50A	100A	50A	100A
Peak Current	100A	200A	100A	200A
Dimension	460*330*780mm 18.1*13*30.7in	600*600*1600mm 23.6*23.6*63in	600*600*1600mm 23.6*23.6*63in	1200*600*1600mm 47.2*23.6*63in
Weight	280kg/617.3lbs	500kg/1102.3lbs	350kg/771.6lbs	600kg/1322.8lbs
Qty/20GP/40GP	45pcs/65pcs	24pcs/35pcs	24pcs/48pcs	12pcs/24pcs
Communication	RS485/CAN			
Temperature	Charge: Charge Temperature; Discharge: -15~ 60°C			

Specifications subject to change without notice, please contact us to get the latest information.

# Solar Energy Storage System Package Solution

With All Kits Ready For Installation

WALL Series



## System Parameter

Item	3KW+5KWh	5KW+5KWh	8KW+10KWh	10KW+10KWh
Half Cell Solar Panel	450W Mono * 8pcs	450W Mono * 12pcs	450W Mono * 16pcs	450W Mono * 22pcs
Inverter	3KW	5KW	8KW	10KW
Lithium Battery	5KWh Lifepo4 Battery (WALL5)		10KWh Lifepo4 Battery (WALL10)	
PV Combiner Box	1pc			
PV Cable	4-6mm2			
Mounting Bracket	Roof/Ground			
MC4 Connector	8pcs	12pcs	16pcs	22pcs
Installation Tools	1set			

Above energy storage system is for reference, please contact us for different requirements.



Mounting Kits  
Roof, ground



Accessories  
Combiner box, cable, MC4

## System Components



Inverter  
3KW, 5KW, 8KW, 10KW



Lithium Battery  
5kWh, 10kWh



Solar Panel  
Half cell 450W



Tools  
Cutter, Stripper, Crimper

# Solar Energy Storage System Package Solution

With All Kits Ready For Installation



## System Parameter

Item	3KW+5KWh	5KW+5KWh	8KW+10KWh	10KW+10KWh
Half Cell Solar Panel	450W Mono * 8pcs	450W Mono * 12pcs	450W Mono * 16pcs	450W Mono * 22pcs
Inverter	3KW	5KW	8KW	10KW
Lithium Battery	5KWh Lifepo4 Battery (KEY5)		10KWh Lifepo4 Battery (KEY10)	
PV Combiner Box	1pc			
PV Cable	4-6mm2			
Mounting Bracket	Roof/Ground			
MC4 Connector	8pcs	12pcs	16pcs	22pcs
Installation Tools	1set			

Above energy storage system is for reference, please contact us for different requirements.



Mounting Kits  
Roof, ground



Accessories  
Combiner box, cable, MC4

## System Components



Inverter  
3KW, 5KW, 8KW, 10KW



Lithium Battery  
5kWh, 10kWh



Solar Panel  
Half cell 450W



Tools  
Cutter, Stripper, Crimper

# Solar Energy Storage System Package Solution

With All Kits Ready For Installation





## System Parameter

Item	5KW+15KWh	8KW+20KWh	10KW+25KWh
Half Cell Solar Panel	450W Mono * 12pcs	450W Mono * 16pcs	450W Mono * 22pcs
Inverter	5KW	8KW	10KW
Lithium Battery	15KWh Lifepo4 Battery (Vertical15)	20KWh Lifepo4 Battery (Vertical20)	25KWh Lifepo4 Battery (Vertical25)
PV Combiner Box	1pc		
PV Cable	4-6mm2		
Mounting Bracket	Roof/Ground		
MC4 Connector	12pcs	12pcs	12pcs
Installation Tools	1set		

Above energy storage system is for reference, please contact us for different requirements.



Mounting Kits  
Roof, ground



Accessories  
Combiner box, cable, MC4

## System Components



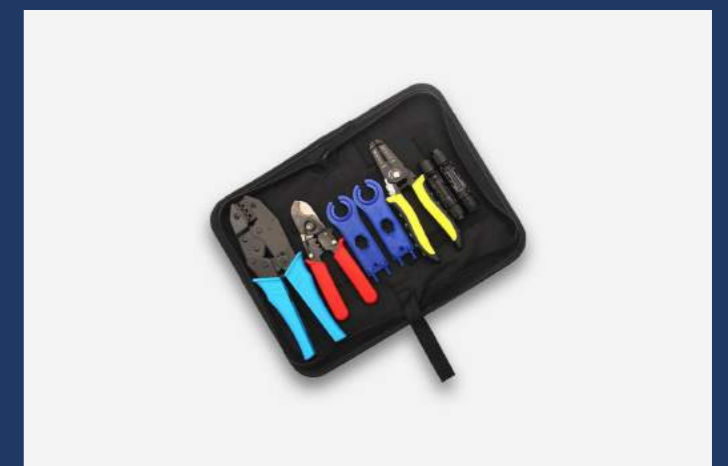
Inverter  
5KW, 8KW, 10KW



Lithium Battery  
15kWh, 20kWh, 25kWh



Solar Panel  
Half cell 450W



Tools  
Cutter, Stripper, Crimper

# Solar Energy Storage System Package Solution

With All Kits Ready For Installation

STK  
Series



## System Parameter

Item	5KW+10kWh	8KW+15KWh	10KW+20KWh
Half Cell Solar Panel	450W Mono * 12pcs	450W Mono * 16pcs	450W Mono * 22pcs
Inverter	5KW	8KW	10KW
Lithium Battery	10KWh Lifepo4 Battery (STK10)	15KWh Lifepo4 Battery (STK15)	20KWh Lifepo4 Battery (STK20)
PV Combiner Box	1pc		
PV Cable	4-6mm2		
Mounting Bracket	Roof/Ground		
MC4 Connector	12pcs	16pcs	22pcs
Installation Tools	1set		

Above energy storage system is for reference, please contact us for different requirements.



Mounting Kits  
Roof, ground



Accessories  
Combiner box, cable, MC4

## System Components



Inverter  
5KW, 8KW, 10KW



Lithium Battery  
10kWh, 15kWh, 20kWh



Solar Panel  
Half cell 450W



Tools  
Cutter, Stripper, Crimper

# Solar Energy Storage System Package Solution

With All Kits Ready For Installation

RACK  
Series



## System Parameter

Item	5KW+10KWh	8KW+15KWh	10KW+20KWh
Half Cell Solar Panel	450W Mono * 12pcs	450W Mono * 16pcs	450W Mono * 22pcs
Inverter	5KW	8KW	10KW
Lithium Battery	10KWh Lifepo4 Battery (RACK48100*2pcs/ RACK48200)	15KWh Lifepo4 Battery (RACK48100*3pcs/ RACK48150*2pcs)	20KWh Lifepo4 Battery (RACK48100*4pcs/ RACK48200*2pcs)
PV Combiner Box	1pc		
PV Cable	4-6mm2		
Mounting Bracket	Roof/Ground		
MC4 Connector	12pcs	16pcs	22pcs
Installation Tools	1set		

Above energy storage system is for reference, please contact us for different requirements.



Mounting Kits  
Roof, ground



Accessories  
Combiner box, cable, MC4

## System Components



Inverter  
5KW, 8KW, 10KW



Lithium Battery  
10kWh, 15kWh, 20kWh



Solar Panel  
Half cell 450W



Tools  
Cutter, Stripper, Crimper



CABINET Series

# Solar Energy Storage System Package Solution

With All Kits Ready For Installation



## System Parameter

Item	5KW+10KWh	8KW+15KWh	10KW+20KWh
Half Cell Solar Panel	450W Mono * 12pcs	450W Mono * 16pcs	450W Mono * 22pcs
Inverter	5KW	8KW	10KW
Lithium Battery	10KWh Lifepo4 Battery (Cabinet10)	15KWh Lifepo4 Battery (Cabinet15)	20KWh Lifepo4 Battery (Cabinet20)
PV Combiner Box	1pc		
PV Cable	4-6mm2		
Mounting Bracket	Roof/Ground		
MC4 Connector	12pcs	16pcs	22pcs
Installation Tools	1set		

Above energy storage system is for reference, please contact us for different requirements.



Mounting Kits  
Roof, ground



Accessories  
Combiner box, cable, MC4

## System Components



Inverter  
5KW, 8KW, 10KW



Lithium Battery  
10kWh, 15kWh, 20kWh



Solar Panel  
Half cell 450W



Tools  
Cutter, Stripper, Crimper

# Solar Energy Storage System Package Solution

With All Kits Ready For Installation





## System Parameter

Item	5KW+5KWh	5KW+10KWh	5KW+15KWh
Half Cell Solar Panel	450W Mono * 12pcs	450W Mono * 12pcs	450W Mono * 12pcs
Inverter	5KW		
Lithium Battery	5KWh Lifepo4 Battery (ONE5)	10KWh Lifepo4 Battery (ONE10)	15KWh Lifepo4 Battery (ONE15)
PV Combiner Box	1pc		
PV Cable	4-6mm2		
Mounting Bracket	Roof/Ground		
MC4 Connector	12pcs		
Installation Tools	1set		

Above energy storage system is for reference, please contact us for different requirements.



Mounting Kits  
Roof, ground



Accessories  
Combiner box, cable, MC4

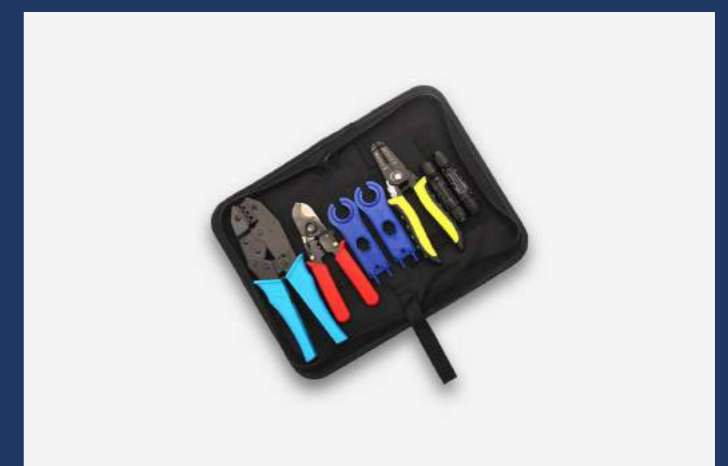
## System Components

Lithium Battery  
5kWh, 10kWh, 15kWh

Built-in Inverter  
5KW



Solar Panel  
Half cell 450W

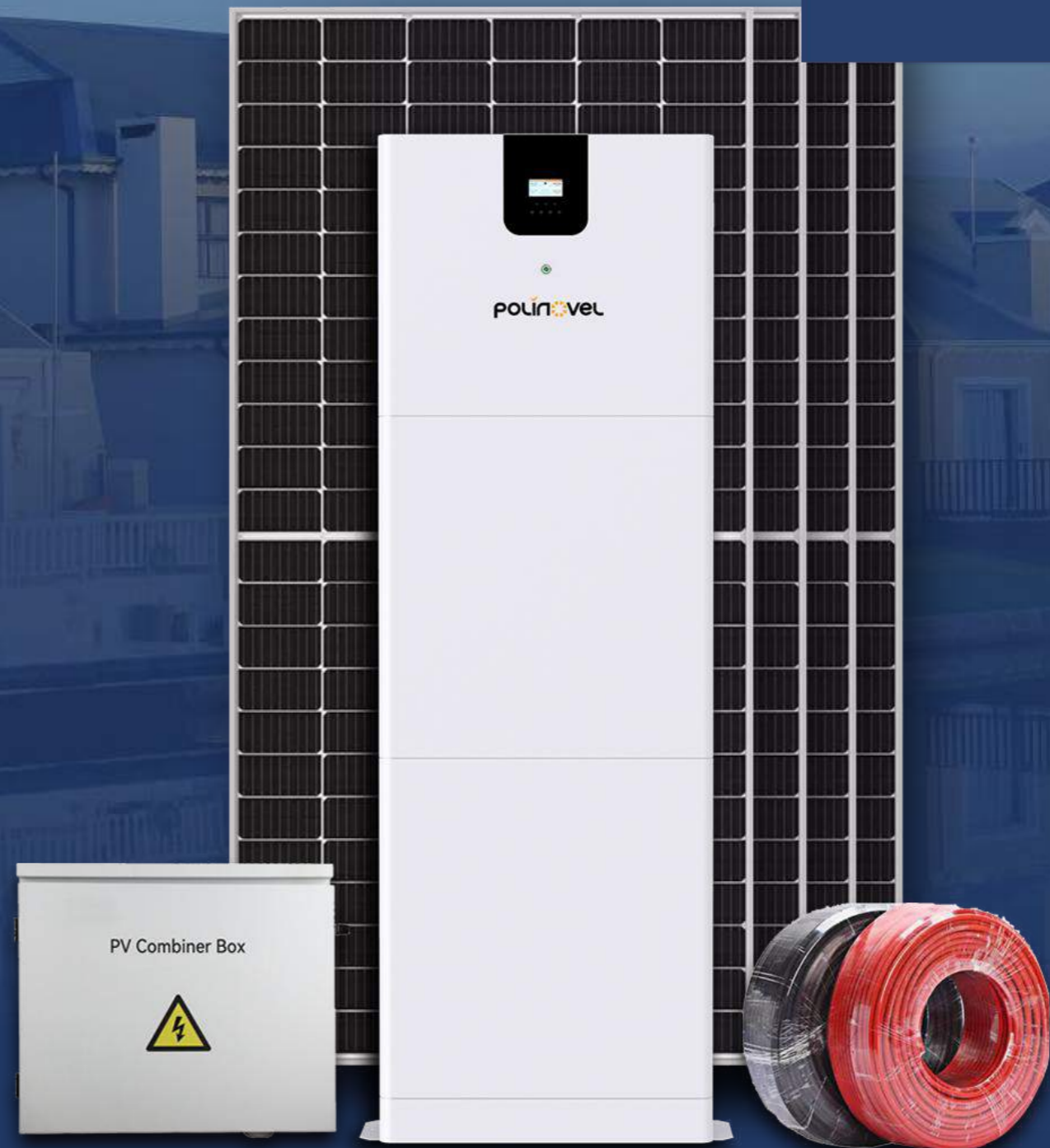


Tools  
Cutter, Stripper, Crimper

WE  
Series

# Solar Energy Storage System Package Solution

With All Kits Ready For Installation



## System Parameter

Item	5KW+5KWh	5KW+10KWh	5KW+15KWh
Half Cell Solar Panel	450W Mono * 12pcs	450W Mono * 12pcs	450W Mono * 12pcs
Inverter	5KW		
Lithium Battery	5KWh Lifepo4 Battery (WE5)	10KWh Lifepo4 Battery (WE10)	15KWh Lifepo4 Battery (WE15)
PV Combiner Box	1pc		
PV Cable	4-6mm2		
Mounting Bracket	Roof/Ground		
MC4 Connector	12pcs		
Installation Tools	1set		

Above energy storage system is for reference, please contact us for different requirements.



Mounting Kits  
Roof, ground



Accessories  
Combiner box, cable, MC4

## System Components

Lithium Battery  
5kWh, 10kWh, 15kWh

Built-in Inverter  
5KW



Solar Panel  
Half cell 450W



Tools  
Cutter, Stripper, Crimper

## Our Projects



### Marine Application

**Project Name:** 24V/36V Lithium Battery For Trolling Motor  
**Project Description:** 2 x 12V 60Ah lithium batteries are connected in series to power 24V Minn Kota trolling motor; A single 40Ah battery powers 36V motor.  
**Location/Time:** Japan, 2021



### Marine Application

**Project Name:** 48V 200Ah Lithium Battery For Catamaran  
**Project Description:** Tailored 48V 200Ah lithium battery works with 1200W solar panel array and 2 x 300W wind turbines power generating systems to provide enough power for two 14HP motors and onboard appliances.  
**Location/Time:** U.S, 2020



### Marine Application

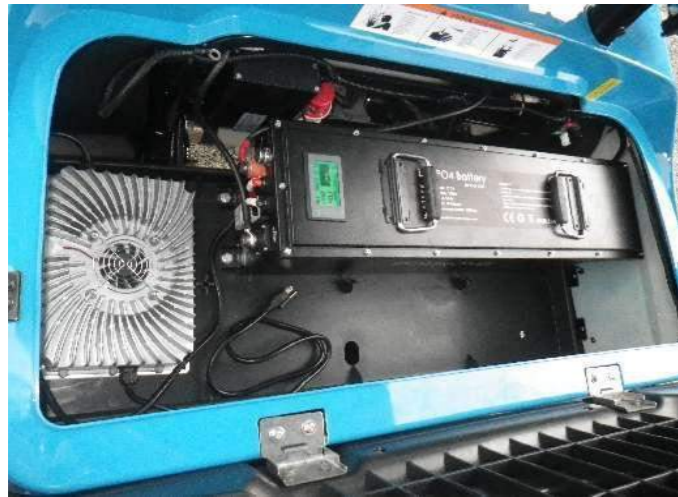
**Project Name:** 48V 300Ah Lithium Battery For Boat  
**Project Description:** 4 x 12V 300Ah lithium batteries are connected in series to get a 48V system and supply reliable power for the rental boat.  
**Location/Time:** Canada, 2021



### RV Application

**Project Name:** 12V 600Ah Lithium Battery For Trailer  
**Project Description:** The 12V 600Ah lithium battery with customized size replaces 4x120Ah lead-acid in the trailer vehicle to take over rough terrain. Drop-in upgrading with no modification on the battery tray.  
**Location/Time:** Australia, 2021

## Our Projects



### Golf Cart Application

**Project Name:** 48V 100Ah Lithium Battery For ICON Golf Cart  
**Project Description:** Tailor-designed 48V 100Ah lithium battery powers 4KW motor of ICON i60L 6 seats golf cart.  
**Location/Time:** U.S, 2020



### Golf Cart Application

**Project Name:** 48V 100Ah Lithium Battery For Club Car Golf Cart  
**Project Description:** Tailor-made 48 volt 100Ah lithium battery replaces six 8 volt Trojan lead-acid batteries, providing power for Club Car Precedent Stretch 48V motor with 2.7kw rated and 14.9kw peak power.  
**Location/Time:** Thailand, 2018



### Golf Cart Application

**Project Name:** 48V 100Ah Lithium Battery For Yamaha Golf Buggy  
**Project Description:** Custom size 100Ah lithium battery drives 48V Yamaha golf buggy motor with 2.6kw output and rating of 30min.  
**Location/Time:** U.K, 2021



### Energy Storage Application

**Project Name:** 48V 7kWh Lithium Backup Power For Home  
**Project Description:** The V7000 48V 7.6kWh power wall lithium battery stores energy for home backup and keeps household appliances running during grid outages.  
**Location/Time:** Puerto Rico, 2020

# Our Projects



## Energy Storage Application

**Project Name:** 48V 30kWh Lithium Residential Energy Storage System  
**Project Description:** 4 x 7.6kWh 48V (V7000) power wall lithium batteries connected in parallel and configured with 3 x 5KW solar inverters that get a 48V 30kWh solar energy storage system.  
**Location/Time:** U.K, 2021



## Industrial Vehicle Application

**Project Name:** 48V 300Ah Lithium Battery For Airport Belt Loader  
**Project Description:** The 48V 300Ah lithium iron phosphate battery is mounted on the conveyor belt loader for loading and unloading baggage and cargo at the airport.  
**Location/Time:** Malaysia, 2020



## Industrial Equipment Application

**Project Name:** 24V 48Ah Lithium Battery For AGV  
**Project Description:** The customized 24V 48Ah lithium battery provides twice the energy and running time of conventional lead-acid, and the faster charging dramatically improves the work efficiency of Automatic Guided Vehicle.  
**Location/Time:** France, 2020



## Industrial Equipment Application

**Project Name:** 80V 500Ah Lithium Battery For Ice Resurfer  
**Project Description:** The 80V 500Ah high energy density lithium battery pack drastically reduced the total weight of the machine. The battery is maintenance-free and does not release hazardous gases, upgrading operators' safety and comfort to a higher level.  
**Location/Time:** U.K, 2020



# Market Performance

## Main Markets

Since its establishment, Polinovel has helped 100+ customers to build their lithium battery brand, main market covers 35+ countries in Europe, North America, South America, Oceania, Asia, Africa.



## Partners




**Disclaimer:**

Polinovel has made this brochure as comprehensive and accurate as possible on the basis of the existing information, but reserve the right to modify the data, parameter, and other information without further notice. Polinovel reserves the right of the final interpretation of this brochure



Pursue A Green Life

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