Pursue A Green Life

Shenzhen Polinovel Tech Co., Ltd

Reliable Manufacturer . China

2025 Version



Contents

01 About Us

02 Our Products

03 Our Projects

04 Market Performance

About Polinovel

Who We Are

Polinovel is an innovative Chinese lithium battery manufacturer, integrating research, development, design, and production, committed to providing professional, safe, and reliable clean energy solutions and services worldwide.

2006
Established

10000m2
Floorspace

50+
R&D Engineers

80%
Export Coverage

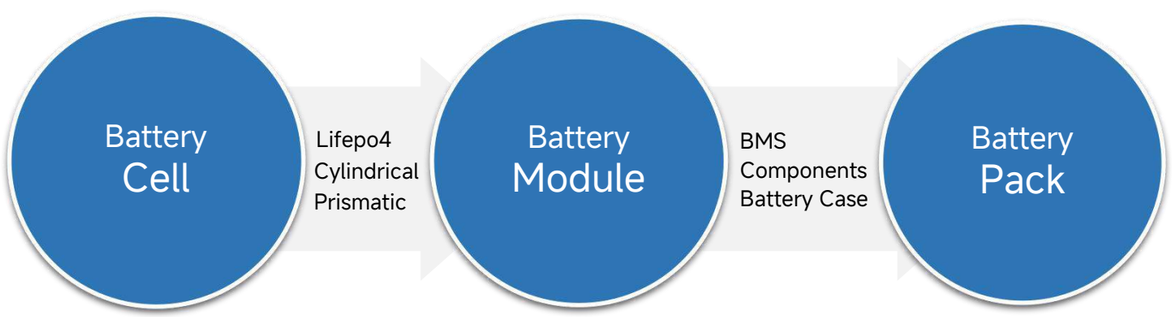


◆ Motive Power Batteries

Provide lithium battery solutions and services for motive power applications across land and 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

Innovation Is The New Power

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%.

1. Advanced Production Facilities
2. Strict Production Processes
3. Professional Production Staffs
4. High-standard Quality Requirements

◆ Comprehensive Testing

Multi-Level Testing
Materials, Cells, Modules, BMS, Packs

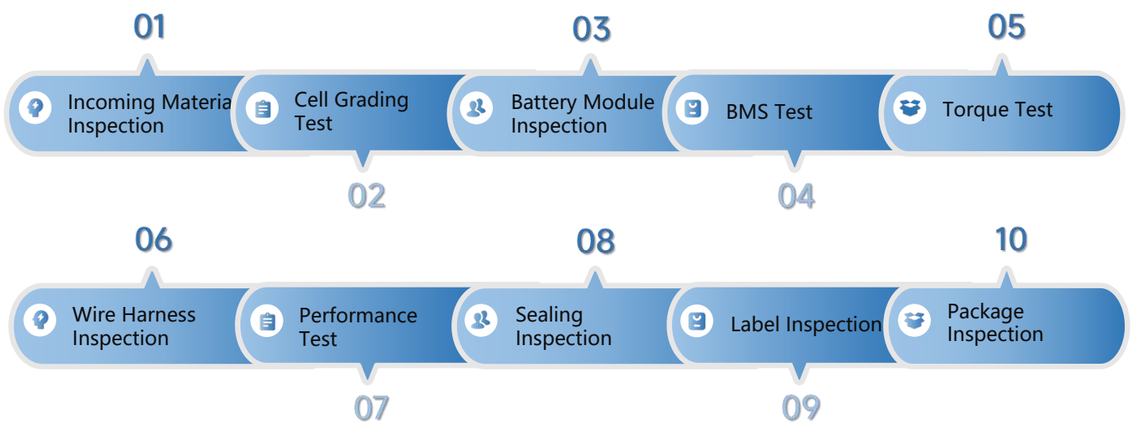
Multi Dimensional Testing
Structure, Craft, Electrical Performance, Safety

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



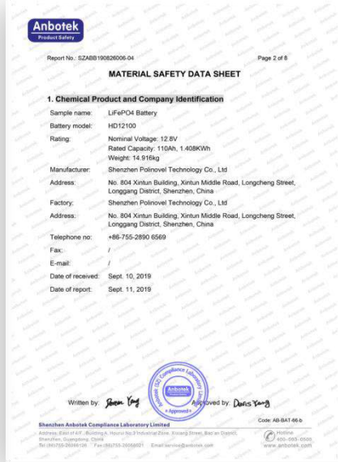
ISO45001



CE



Emark



MSDS



UN38.3-Sea



UN38.3-Air



Insurance

Competitiveness

Safety And Reliability

Material safety, electrical safety, and system safety are taken as the basis for product development and manufacturing to ensure the safety and reliability of the product throughout the life cycle.

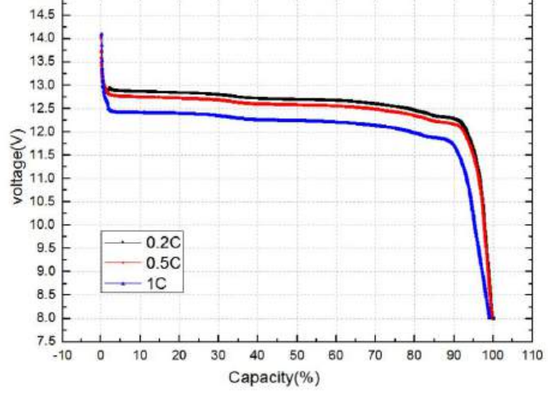
Material Safety

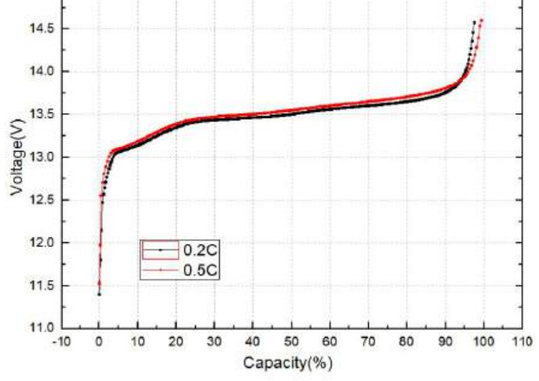
System Safety

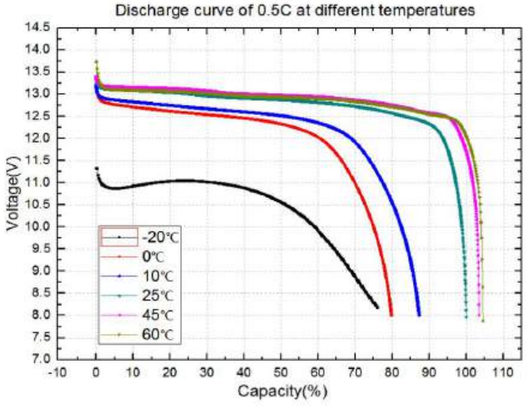
Electrical Safety

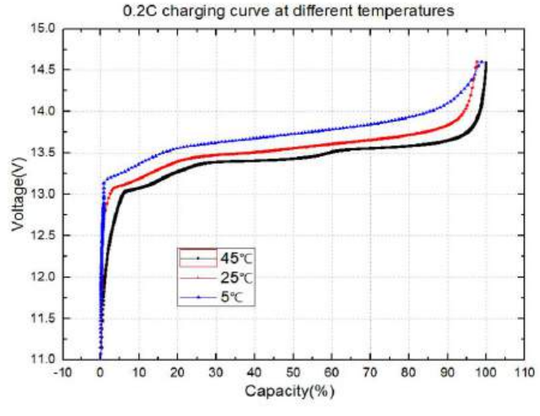
Long Service Life

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









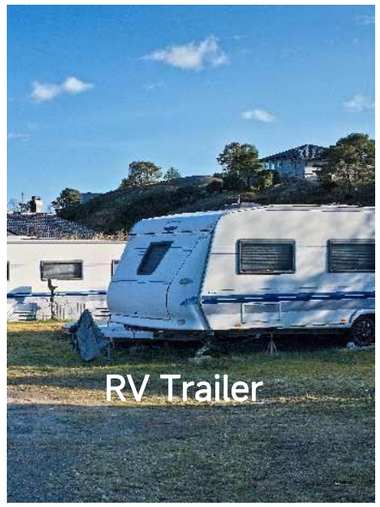
Innovative Technology

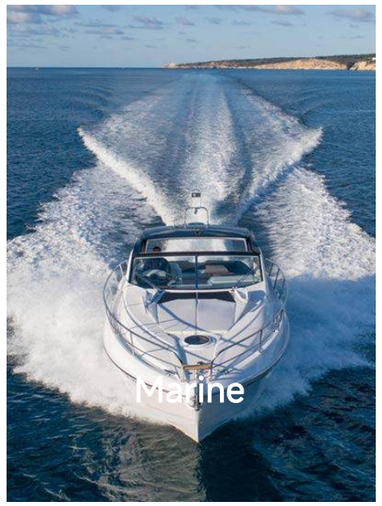
Polinovel successfully developed Bluetooth monitoring, self-heated function, RS232, RS485, CANbus, WiFi, and GPRS communication technology on lithium batteries and has stayed at the forefront of market trends.

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, residential and commercial power supply.

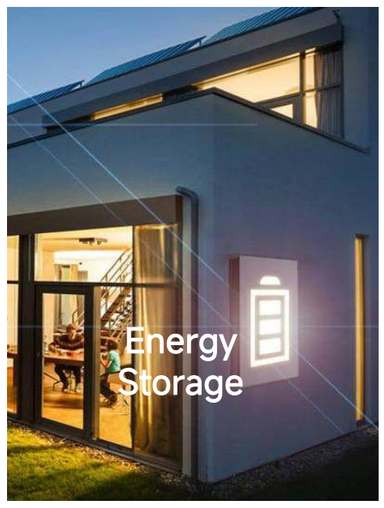










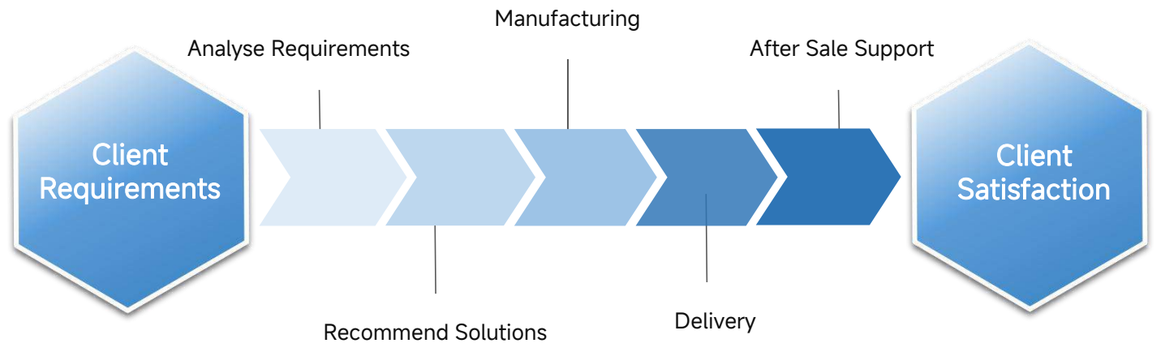


Five Star Service From Start To Finish

★★★★★

◆ Professional ◆ Efficient ◆ Comprehensive

Polinovel maintains a customer-centric service attitude whenever and wherever possible. 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

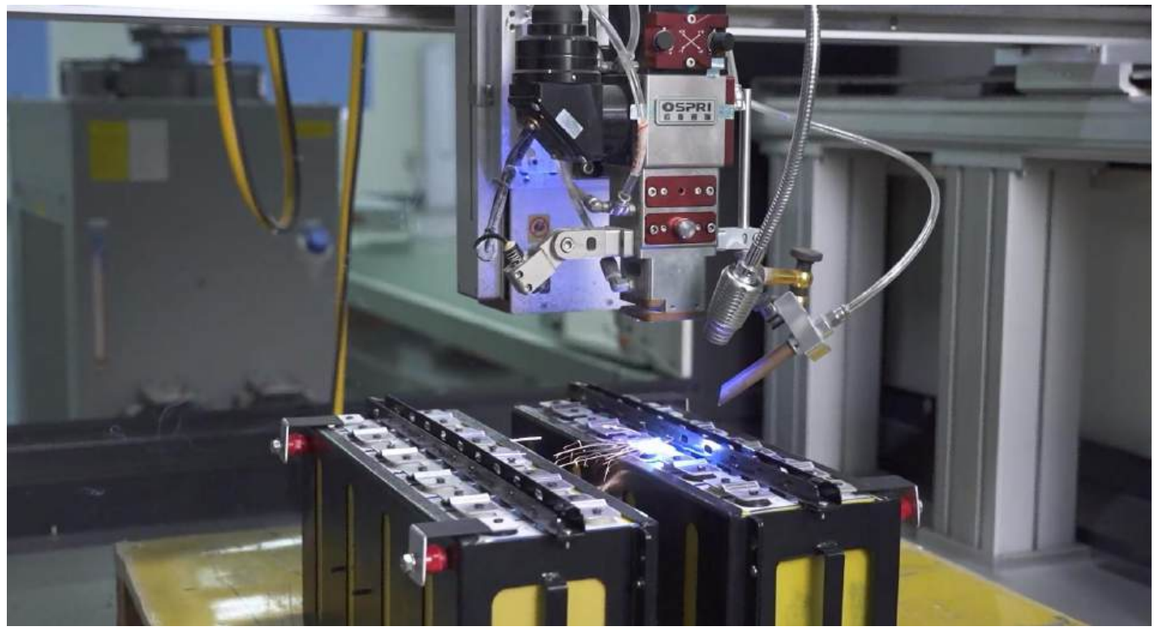
Project manager and engineers work with the customers to create the most feasible lithium battery solutions.

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 responses to battery use, maintenance and repair questions.



Trusted Lithium Batteries You Can Count On

Polinovel develops and manufactures traction and energy storage batteries for a variety of applications, including RVs, marine vessels, golf carts, forklifts, floor cleaning machines, AGVs (Automated Guided Vehicles), residential and commerical energy storage systems. These solutions help optimize energy structure and reduce energy costs.









Tailored Customization

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

◆ What Can Be Customized?

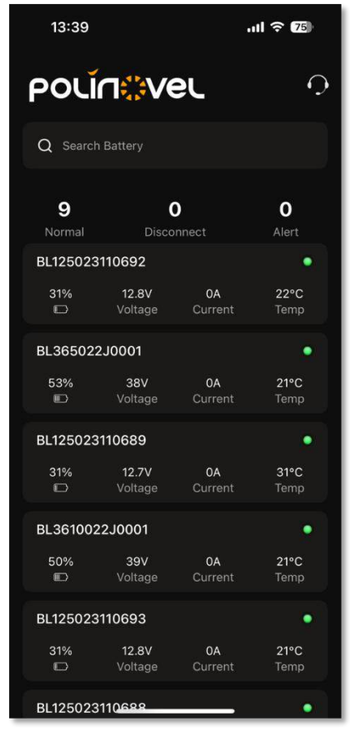
① Voltage
② Capacity
③ Discharge Current
④ Dimension
⑤ Communication

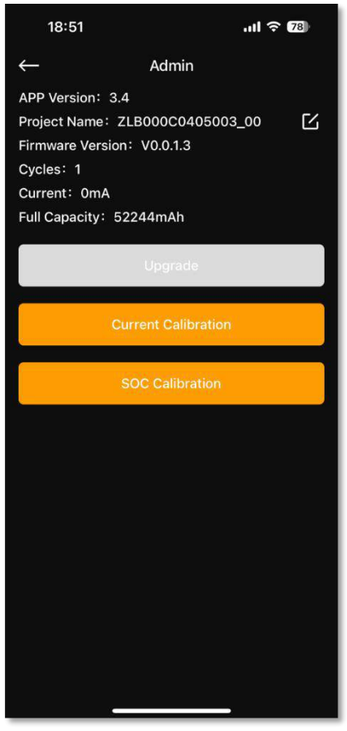
⑥ Custom Label



APP “iPolinovel”









BL Series | Bluetooth Lithium Battery

Polinovel BL Series smart lithium iron phosphate (LiFePO4) batteries are designed as direct replacements for standard BCI group-size deep-cycle lead-acid batteries. They offer excellent cycle life, lighter weight, more usable energy, and superior performance. The Bluetooth feature enables monitoring of battery status, controlling the power switch, and wireless troubleshooting via a mobile phone.

Key Features

Monitor the real-time status of multiple batteries simultaneously on your phone and easily manage battery inventory.

Remotely turn on or off battery discharge to enhance safety during charging and reduce self-consumption during storage.

Wireless upgrade program, calibrate current, and SOC for more efficient and cost-effective troubleshooting.

Works well in parallel with lead-acid and other conventional batteries for easy compatibility.

Battery Specification

Model	Nominal Voltage	Nominal Capacity	Energy	Recommend Charge Voltage	Max. Charge Current	Max. Constant Discharge Current	Peak Discharge Current	Dimension (L*W*H) mm/in	Weight kg/lbs	Qty/ 20GP pcs	Qty/ 40GP pcs
BL1250	12.8V	50Ah	640Wh	14.6V	50A	50A	100A@5s	230*145*210 (9*5.7*8.3")	8kg/18lbs	840	1680
BL12105	12.8V	105Ah	1344Wh	14.6V	100A	100A	200A@5s	329*172*214 (13*6.8*8.4")	11.5kg/25lbs	700	1400
BL12105LA	12.8V	105Ah	1344Wh	14.6V	100A	100A	200A@5s	329*172*214 (13*6.8*8.4")	11.5kg/25lbs	700	1400
BL12160	12.8V	160Ah	2048Wh	14.6V	100A	200A	400A@5s	483*170*240 (19*6.7*9.4")	20kg/44lbs	250	500
BL12210	12.8V	210Ah	2688Wh	14.6V	100A	200A	400A@5s	522*240*218 (20.5*9.4*8.6")	25kg/55lbs	250	500
BL12304	12.8V	304Ah	3891Wh	14.6V	100A	200A	400A@5s	522*269*218 (20.5*10.6*8.6")	34kg/75lbs	250	500
BL12460	12.8V	460Ah	5888Wh	14.6V	100A	200A	400A@5s	522*269*218 (20.5*10.6*8.6")	45kg/99lbs	250	500
BL12525	12.8V	525Ah	6720Wh	14.6V	100A	200A	400A@5s	640*245*220 (25.2*9.6*8.6")	60kg/132lbs	200	400
BL2450	25.6V	50Ah	1280Wh	29.2V	50A	50A	100A@5s	329*172*214 (13*6.8*8.4")	13kg/29lbs	700	1400
BL24105	25.6V	105Ah	2688Wh	29.2V	100A	100A	200A@5s	522*240*218 (20.5*9.4*8.6")	25kg/55lbs	250	500
BL24160	25.6V	160Ah	4096Wh	29.2V	100A	200A	400A@5s	522*269*218 (20.5*10.6*8.6")	34kg/75lbs	250	500
BL24230	25.6V	230Ah	5888Wh	29.2V	100A	200A	400A@5s	522*269*218 (20.5*10.6*8.6")	45kg/99lbs	250	500
BL3640	38.4V	40Ah	1536Wh	43.8V	40A	50A	100A@5s	329*172*214 (13*6.8*8.4")	15kg/33lbs	700	1400
BL3660	38.4V	60Ah	2304Wh	43.8V	60A	100A	200A@5s	329*172*214 (13*6.8*8.4")	20kg/44lbs	700	1400
BL36105	38.4V	105Ah	4032Wh	43.8V	100A	100A	200A@5s	522*269*218 (20.5*10.6*8.6")	29kg/64lbs	250	500
BL36160	38.4V	160Ah	6144Wh	43.8V	100A	100A	200A@5s	640*245*220 (25.2*9.6*8.6")	45kg/99lbs	200	400
BL48105	51.2V	105Ah	5376Wh	58.4V	100A	200A	420A@30s	522*269*218 (20.5*10.6*8.6")	50kg/110lbs	250	500

General Data	
Casing Material	ABS
IP Rating	IP65
Battery Type	Lithium Iron Phosphate (LiFePO4)
Cycle Life	>2500 (1C@DOD100%); >4000 (0.2C@DOD100%)
Temperature	Charge: 0~60°C; Discharge: -20~60°C; Storage: 10~45°C

Specifications are subject to change without notice. Please contact us to get the latest information



DUAL Series | Dual Purpose Lithium Battery

Polinovel DUAL Series consists of high-performance dual-purpose lithium batteries designed for **starting and deep cycling**. These batteries deliver a surge of high current to start the engine and provide consistent power to operate equipment with high power requirements. The smart BMS with Bluetooth functionality allows users to monitor, and troubleshoot the batteries via a mobile phone, they are ideal for marine boats, trolling motors, cars, trucks, and more outdoor scenarios.

Key Features

Monitor the real-time status of multiple batteries simultaneously on your phone and easily maintain battery inventory.

Remotely turn on or off battery discharge to enhance safety during charging and reduce self-consumption during storage.

Wireless upgrade program, calibrate current, and SOC for more efficient and cost-effective troubleshooting.

Works well in parallel with lead-acid and other conventional batteries for easy compatibility.

Battery Specification

OVERRIDE button can release some power for emergency use when the battery occasionally enters over-discharge protection.

RESET button can boost dead batteries to life again and restore the Bluetooth connection in case of signal loss..





Model	Nominal Voltage	Nominal Capacity	Energy	Starting Current	Max Charge Current	Max. Constant Discharge Current	Peak Discharge Current	Dimension (L*W*H) mm/in	Weight kg/lbs	Qty/ 20GP pcs	Qty/ 40GP pcs
DUAL1260	12.8V	60Ah	768Wh	800CAA	60A	100A	150A@30s	230*175*183 (9.1*6.9*7.2")	6.5kg/14.3lbs	840	1680
DUAL1280	12.8V	80Ah	1024Wh	800CCA	60A	100A	200A@30s	279*175*188 (11*6.9*7.4")	10kg/22lbs	840	1680
DUAL12105	12.8V	105Ah	1344Wh	1200CCA	100A	200A	300A@30s	307*174*220 (12.1*6.9*8.7")	11kg/24.2lbs	700	1400
DUAL12105LA	12.8V	105Ah	1344Wh	1200CCA	100A	200A	300A@30s	307*169*208 (12.1*6.7*8.2")	11kg/24.2lbs	700	1400
DUAL12160	12.8V	160Ah	2048Wh	1200CCA	100A	200A	350A@30s	328*172*235 (12.9*6.8*9.3")	16.5kg/36.4lbs	480	960
DUAL12160LA	12.8V	160Ah	2048Wh	1200CCA	100A	200A	350A@30s	328*172*235 (12.9*6.8*9.3")	16.5kg/36.4lbs	480	960
DUAL12210	12.8V	210Ah	2688Wh	2000CCA	100A	250A	350A@30s	522*240*218 (20.6*9.4*8.6")	20kg/44.1lbs	250	500
DUAL1660	16.0V	60Ah	960Wh	1200CCA	60A	100A	150A@30s	230*175*183 (9.1*6.9*7.2")	7.5kg/16.5lbs	840	1680
DUAL24105	25.6V	105Ah	2688Wh	1200CCA	100A	200A	300A@30s	522*240*218 (20.6*9.4*8.6")	25kg/55lbs	250	500
DUAL24230	25.6V	230Ah	5888Wh	1200CCA	100A	200A	350A@30s	640*245*220 (25.2*9.6*8.7")	42kg/92.6lbs	200	400

General Data	
Battery Type	Lithium Iron Phosphate (LiFePO4)
Cycle Life	≥2500
Charge Temperature	0 to 60°C
Discharge Temperature	-20 to 60°C
Storage Temperature	10 to 45°C

Specifications are subject to change without notice. Please contact us to get the lastest information.



FL Series | Forklift Lithium Battery

Polinovel FL Series lithium batteries are ideal power meets the performance of forklifts and other industrial vehicles. Compared to lead-acid batteries, the improved efficiency and longer run time of lifepo4 forklift batteries can save substantial time and cost through increased productivity, smarter use of resources and a lower cost of ownership.

Key Features

Utilizes high-rate lithium iron phosphate battery developed for special working conditions of industrial vehicles.

Integrated with an intelligent BMS to scientifically manage the battery, realize automatic balance, and extend the service life.

Key components have undergone rigorous reliability testing and market validation to ensure the safe and stable performance of the entire machine.

CAN bus data transmission, enables seamless docking with the vehicle control and charging systems.

Battery Specification

Model	FL25210	FL25440	FL51315
Nominal Voltage	25.6V	25.6V	51.2V
Nominal Capacity	210Ah	440Ah	315Ah
Energy	5376Wh	11264Wh	16128Wh
Charge Voltage	29.2V	29.2V	58.4V
Discharge Cut-off Voltage	22V	22V	44V
Charge Current	≤100A	≤150A	≤150A
Constant Discharge Current	100A	200A	150A
Peak Discharge Current	200A@20s	400A@10s	300A@20s
Dimension (mm)	624*212*627	830*320*625	827*625*627
Dimension (in)	24.6*8.3*24.7	32.7*12.6*24.6	32.6*24.6*24.7
Battery Weight	210kg/463lbs	445kg/981lbs	852kg/1878lbs
Cycle Life	>2000 (1C@DOD100%); >4000 (0.2C@DOD100%)		
Temperature	Charge: 0~45°C; Discharge: -20~55°C; Storage: 20~45°C		
Model	FL51525	FL80420	FL83630
Nominal Voltage	51.2V	80V	83.2V
Nominal Capacity	525Ah	420Ah	630Ah
Energy	26880Wh	33600Wh	52416Wh
Charge Voltage	58.4V	91.2V	94.9V
Discharge Cut-off Voltage	44V	68.6V	71.5V
Charge Current	≤200A	≤200A	≤200A
Constant Discharge Current	200A	200A	200A
Peak Discharge Current	400A@20s	400A@20s	400A@20s
Dimension (mm)	1100*410*655	1015*682*550	1028*999*784
Dimension (in)	43.3*16.1*25.8	40*26.9*21.7	40.5*39.3*30.9
Battery Weight	535kg/1180lbs	335kg/739lbs	2100kg/4630lbs
Cycle Life	>2000 (1C@DOD100%); >4000 (0.2C@DOD100%)		
Temperature	Charge: 0~45°C; Discharge: -20~55°C; Storage: 20~45°C		

Specifications are subject to change without notice. Please contact us to get the lastest information.



GOLF Series | Golf Cart Lithium Battery

Polinovel GOLF Series are lithium battery packs with an integrated BMS, designed to replace lead-acid batteries for golf carts and utility vehicles. They provide less weight, more power, and zero maintenance, which allows you to enjoy more mileage on a single charge and stronger acceleration up hills with improved safety.

Key Features

Rrobust construction with increased power, offering longer mileage and stronger uphill performance.

Intelligent BMS protect your golf cart from reverse current during braking when the battery is fully charged.

Custom size solution for a seamless drop-in replacement and easy installtion.

Plug-and-play gauge allows for real-time monitoring of the remaining SOC.

Battery Specification

Model	Golf36105	Golf36230	Golf48105
Nominal Voltage	38.4V	38.4V	51.2V
Nominal Capacity	105Ah	230Ah	105Ah
Energy	4032Wh	8832Wh	5376Wh
Standard Charge Voltage	43.8V	43.8V	58.4V
Discharge Cut-off Voltage	30V	30V	40V
Standard Charge Current	50A	50A	50A
Max. Charge Current	100A	100A	100A
Max. Constant Discharge Current	150A	200A	200A
Peak Discharge Current	320A@30s	400A@10s	420A@30s
Dimension (L*W*H) mm/in	436*334*243mm (17.2*13.1*9.6")	670*278*280mm (26.4*10.9*11")	520*334*243mm (20.5*13.1*9.6")
Weight	40kg/88.2lbs	75kg/165.3lbs	50kg/110lbs
Qty/20GP/40GP	300pcs/520pcs	170pcs/240pcs	225pcs/410pcs
Case Material	Metal	Metal	Metal
Cycle Life	>2500 (1C@ DOD100%); >4000 (0.2C@ DOD100%)		
Temperature	Charge: 0~60°C, Discharge: -20~ 60°C, Storage: 10~ 45°C		

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

Specifications are subject to change without notice. Please contact us to get the lastest 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.

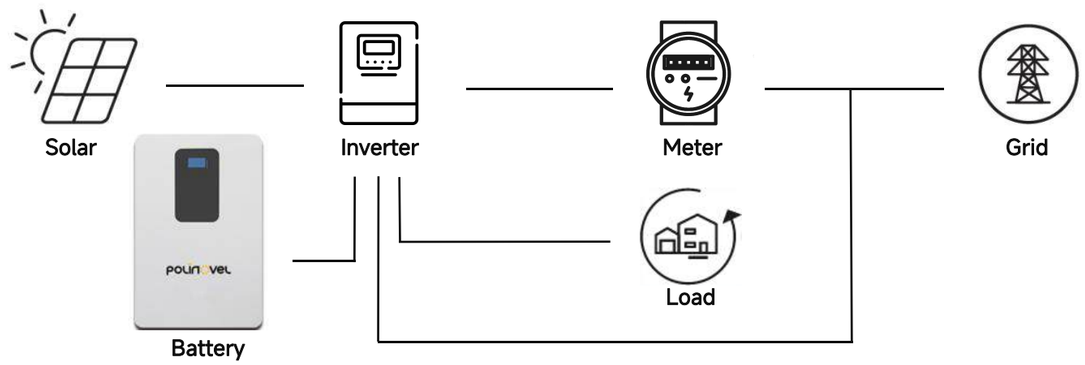
Compatible with 20+ inverter brands for seamless communication.

Battery Specification

Model	WALL5	WALL10
Nominal Voltage	51.2V	
Nominal Capacity	100Ah	200Ah
Energy	5.12kWh	10.24kWh
Charge Cut-off Voltage	58.4V	
Standard Charge Current	20A	40A
Max. Charge Current	100A	200A
Discharge Cut-off Voltage	43.2V	
Constant Discharge Current	100A	200A
Peak Discharge Current	200A@5s	300A@5s
Max. Modules in Parallel	15pcs in parallel	
Communication	RS485/CAN	
Dimension (L*W*H) mm/in	600*440*168mm / 23.6*17.3*6.6"	780*505*168mm / 30.7*20.0*6.6"
Weight	51kg/112.4lbs	90kg/198.4lbs
Qty/20GP/40GP	250pcs/420pcs	140pcs/200pcs
Temperature	Charge: 0~45°C; Discharge: -20~ 55°C; Storage: -10~ 40°C	

Specifications are subject to change without notice. Please contact us to get the lastest 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

Compatible with 20+ inverter brands for seamless communication.

Suport 15pcs in parallel connection for flexible energy expansion.

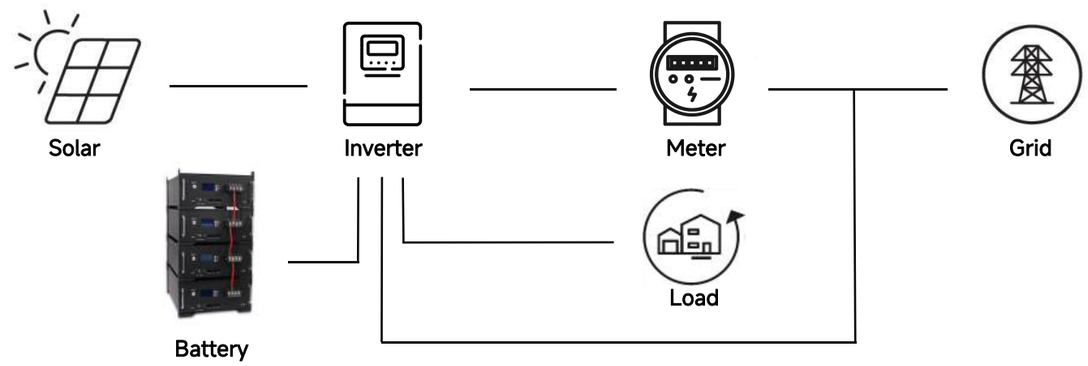
3U, 4U, 5U sizes available with max 200A high current.

Battery Specification

Model	RACK48100	RACK48200	RACK48280	RACK51100	RACK51200	RACK51280
Nominal Voltage	48V			51.2V		
Nominal Capacity	100Ah	200Ah	280Ah	100Ah	200Ah	280Ah
Energy	4.8kWh	9.6kWh	13.44kWh	5.12kWh	10.24kWh	14.336kWh
Charge Cut-off Voltage	54.75V			58.4V		
Standard Charge Current	20A	40A	40A	20A	40A	40A
Max. Charge Current	100A	200A	200A	100A	200A	200A
Discharge Cut-off Voltage	40.5V			43.2V		
Constant Discharge Current	100A	200A	200A	100A	200A	200A
Peak Discharge Current	200A@5s	300A@5s	300A@5s	200A@5s	300A@5s	300A@5s
Max. Modules in Parallel	15pcs in parallel					
Communication	RS485/CAN					
Dimension (mm)	550*482*133	812*513*205	772*460*237	550*482*133	812*513*205	772*460*237
Dimension (inch)	21.7*19.0*5.2	32*20.2*8.1	30.4*18.1*9.3	21.7*19.0*5.2	32*20.2*8.1	30.4*18.1*9.3
Weight (kg)	45kg	84kg	108kg	47kg	88kg	114kg
Weight (lbs)	99.2lbs	185.2lbs	238.1lbs	103.6lbs	194lbs	251.3lbs
Qty/20GP/40GP	250p/420pcs	130/190pcs	100/140pcs	250/420pcs	130/190pcs	100/140pcs
Temperature	Charge: 0~45°C; Discharge: -20~ 55°C; Storage: -10~ 40°C					

Specifications are subject to change without notice. Please contact us to get the lastest information.

System Diagram





CABINET Series | Energy Storage Battery

Polinovel Cabinet Series lithium battery is available in capacities of 30kWh, 50kWh, and 70kWh, 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

Compatible with 20+ inverter brands for seamless communication.

Scalable battery allows 15 units in parallel connection for energy expansion.

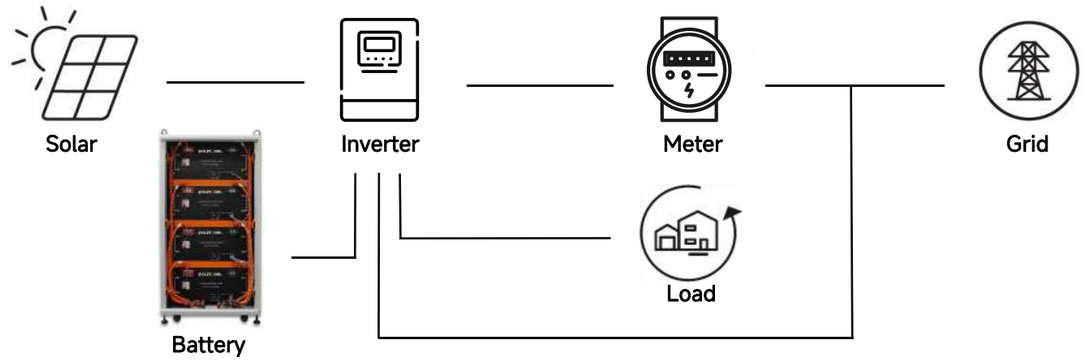
The integrated custom design of battery module and cabinet makes installation easier.

Battery Specification

Model	Cabinet30	Cabinet50	Cabinet70
Nominal Voltage	51.2V		
Nominal Capacity	600Ah	1000Ah	1400Ah
Energy	30.72kWh	51.20kWh	71.68kWh
Charge Cut-off Voltage	58.4V		
Standard Charge Current	40A		
Max. Charge Current	200A		
Discharge Cut-off Voltage	43.2V		
Constant Discharge Current	200A		
Peak Discharge Current	300A@5s		
Communication	RS485/CAN		
Battery Modules	3pcs * 51.2V 200Ah	5pcs * 51.2V 200Ah	5pcs * 51.2V 280Ah
Dimension (L*W*H) mm/in	630*1100*1080mm (24.8*43.3*42.5")	630*1100*1500mm (24.8*43.3*59.1")	630*1100*1710mm (24.8*43.3*67.3")
Weight	420kg/926lbs	610kg/1345lbs	720kg/1587lbs
Qty/20GP/40GP	12pcs/24pcs	12pcs/24pcs	12pcs/24pcs
Temperature	Charge: 0~45°C; Discharge: -20~ 55°C; Storage: -10~ 40°C		

Specifications are subject to change without notice. Please contact us to get the lastest 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 for energy storage.

Automative-grade quality standard provides far superior performance.

Support series connection for flexible energy expansion.

Battery Specification

Model	HV19250	HV192100	HV24050	HV240100	HV300100
Nominal Voltage	192V		240V		307V
Nominal Capacity	50Ah	100Ah	50Ah	100Ah	100Ah
Energy	9.6kWh	19.2kWh	12kWh	24kWh	30.7kWh
Charge Cut-off Voltage	218V		200V		346V
Discharge Cut-off Voltage	160V		270V		254V
Standard Charge Current	25A	50A	25A	50A	50A
Max. Charge Current	50A	100A	50A	100A	100A
Constant Discharge Current	50A	100A	50A	100A	100A
Peak Discharge Current	100A	200A	100A	200A	200A
Dimension (L*W*H) mm/in	460*330*480mm (18.1*13*18.9")	600*600*1600mm (23.6*23.6*63in)	460*330*640mm (18.1*13*25.2")	1530*600*600mm (60.2*23.6*23.6")	620*620*1420mm (24.4*24.4*56")
Weight	100kg/220.5lbs	190kg/418.9lbs	170kg/374.8lbs	260kg/573.2lbs	326kg/718.7lbs
Qty/20GP/40GP	130pcs/190pcs	24pcs/48pcs	75pcs/110pcs	24pcs/48pcs	24pcs/35pcs
Communication	RS485/CAN				
Temperature	Charge: 0~50°C; Discharge: -15~60°C				

Model	HV38450	HV384100	HV40050	HV48050	HV480100
Nominal Voltage	384V		409.5V	480V	
Nominal Capacity	50Ah	100Ah	50Ah	50Ah	100Ah
Energy	19.2kWh	38.4kWh	20.475kWh	24kWh	48kWh
Charge Cut-off Voltage	435V		461V	545V	
Discharge Cut-off Voltage	320V		333V	400V	
Standard Charge Current	25A	50A	25A	25A	50A
Max. Charge Current	50A	100A	50A	50A	100A
Constant Discharge Current	50A	100A	50A	50A	100A
Peak Discharge Current	100A	200A	100A	100A	200A
Dimension (L*W*H) mm/in	460*330*780mm (18.1*13*30.7")	600*600*1600mm (23.6*23.6*63")	620*620*1020mm (24.4*24.4*40.2")	600*600*1600mm (23.6*23.6*63")	1200*600*1600mm (47.2*23.6*63")
Weight	280kg/617.3lbs	500kg/1102.3lbs	231kg/509.3lbs	350kg/771.6lbs	600kg/1322.8lbs
Qty/20GP/40GP	45pcs/65pcs	24pcs/35pcs	32pcs/46pcs	24pcs/48pcs	12pcs/24pcs
Communication	RS485/CAN				
Temperature	Charge: 0~50°C; Discharge: -15~60°C				

Specifications are subject to change without notice. Please contact us to get the lastest information.



CBS Series | Commercial Energy Storage System

Polinovel CBS Series Energy Storage System is a high-performance solution specifically designed for outdoor environments. Its modular design integrates all essential components, ensuring full compatibility with solar panels and wind energy systems. This advanced configuration provides a stable and reliable power supply for commercial and industrial facilities, guaranteeing continuous, uninterrupted operation.

Key Features

Pre-installed system comes with all necessary components integrated for quick and efficient deployment.

Modular design simplifies maintenance procedures and helps reduce long-term operational costs.

The robust structure is equipped with multiple safety protections, ensuring safe and stable operation in outdoor environments.

Battery Specification

Model	CBS107	CBS180	CBS197	CBS215
Energy	107.52KWH	179.20KWH	197.12KWH	215.04KWH
Rated Voltage	384V	640V	704V	768V
Rated Capacity	280Ah	280Ah	280Ah	280Ah
Combination Mode	120S1P	200S1P	220S1P	240S1P
Voltage Range	350~425V	580~710V	640~770V	695~840V
Max. Charge Current	0.5C	0.5C	0.5C	0.5C
Max. Continuous Discharge Current	1C	1C	1C	1C
Dimension (L*W*H) mm/in	1200*1355*2150mm / 47.2*53.4*84.7"		1850*1355*2150mm / 72.8*53.4*84.7"	
Weight	820kg / 1807.8lbs	1350kg / 2976.2lbs	1500kg / 3306.9lbs	1650kg / 3637.6lbs
Cycle Life	≥6000 cycles @ 25°C 80% DOD			
Communication	RS485 / CAN			
Rated AC Output Power	50KW	100KW	100KW	100KW
Max. AC Current	72A	140A	140A	140A
Rated AC Voltage	400V (3W+N+PE/3W+PE)			
AC Voltage Range	154V~276V			
Rated Grid Frequency	50Hz/60Hz			
Grid Type	Three Phase			
IP Rating	IP54			
Display	Touch Screen LCD			
Cooling Mode	Forced-air			
Noise Emission	≤70dB			
Ambient Temperature	-20°C~55°C (derating above 45°C)			
Relative Humidity	0~95% (non-condensing)			
Altitude	3000m (derating above 2000m)			

Specifications are subject to change without notice. Please contact us to get the lastest information.



CBESS Series | Containerized Battery Energy Storage System

Polinovel CBESS Series all-in-one containerized battery energy storage systems offer flexibility by utilizing stored energy during peak demand periods. These plug-and-play solutions are fully manufactured, pre-configured, commissioned, and tested at our facilities, enabling quick deployment with minimal on-site impact. The system is equipped with LiFePO4 batteries, a power conversion system, an intelligent controller, and all associated safety equipment, including fire suppression and battery management systems.

Key Features

All-in-one containerized design for quick and easy installation and maintenance.

Maximum safety through the use of the safest LiFePO4 batteries, combined with an intelligent BMS and other essential safety features.

Outstanding performance and long lifespan, optimized for both on-grid and off-grid applications.

Battery Specification

Battery Parameter

Model	CBESS2150
Energy	2150.4KWH
Configuration	10 Clusters*768V 280Ah
Rated Voltage	768V
Operating Voltage Range	648~876Vdc (2.7~3.65V)

PCS Parameter

DC Side	Voltage Range	600~900Vdc
	DC Channel	5
	Single Channel Rated Current	85A
AC On Grid Side	Output Line System	3W+N+PE / 3W+PE
	Rated Power	250KW
	Rated Voltage	380Vac/400Vac
	Rated Frequency	50Hz/60Hz
	Voltage Range	-15%~+10%
	Rated Current	100~200A
	Power Factor	1
	Output Hamonic	3%
AC Off Grid Side	Output Line System	3W+N+PE / 3W+PE
	Rated Power	250KW
	Rated Voltage	380Vac/400Vac
	Rated Frequency	50Hz/60Hz
	Rated Current	379A
	Voltage Accurace	1%
	Output Voltage Hamonics	3% (Linear Full Load)

General Parameter

Environment	Working Temperature	-20°C~55°C (derating above 45°C)
	Storage Temperature	-20°C~60°C
	Relative Humidity	0~95% (non-condensing)
	Working Altitude	2000m@45°C (Derating 2000~4000m)
	Noise	≤70dB
Others	Communication Method	RS485/CAN
	Isolation Method	Isolation Transformer
	IP Rating	IP54
	Cooling Method	Air Cooling
	Max. Efficiency	98.5% (Excluding the isolation transformer)
	Fire Protection	HFC-ea
	Dimension (W*D*H)	12196*2438*2591mm / 480.2*96*102"

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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

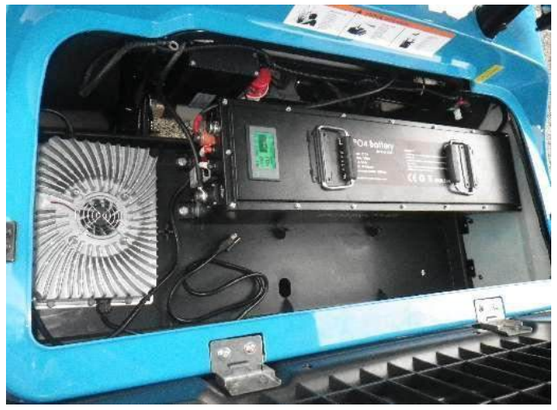




RV Application

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 Yahama Golf Buggy
Project Description: Custom size 100Ah lithium battery drives 48V Yahama 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 Sorage System
Project Description: 4 x 7.6kWh 48V (V7000) power wall lithium batteries connected in parallel and configured with 3 x 5KW solar inverters to create 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





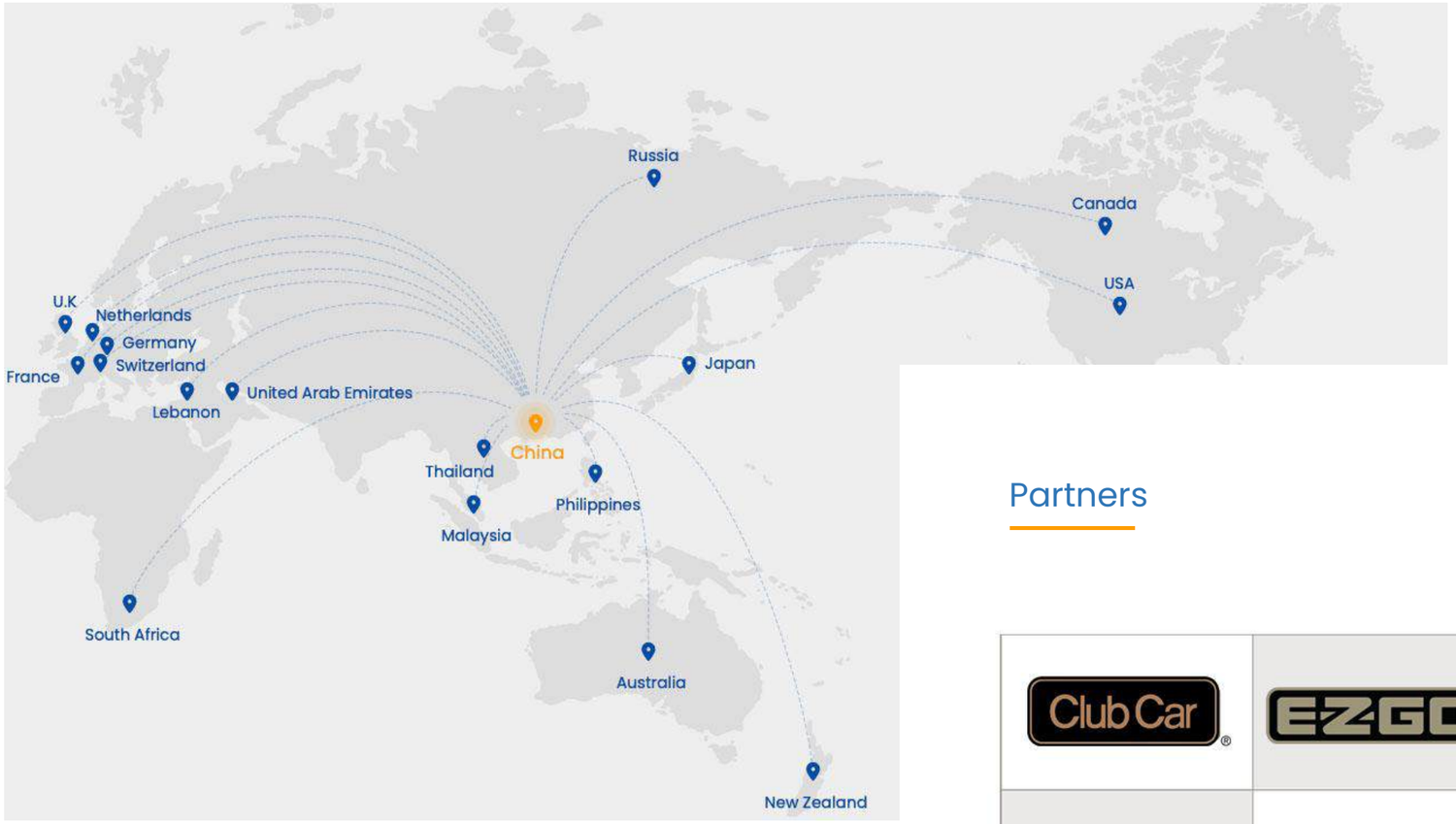
Industrial Equipment Application

Project Name: 80V 500Ah Lithium Battery For Ice Resurfacer
Project Description: The 80V 500Ah high energy density lithium battery pack drastically reduces 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 establishment, Polinovel has helped 100+ customers build their lithium battery brands, with main market spanning 35+ countries in Europe, North America, South America, Oceania, Asia, Africa.



World

Partners

Club Car	EZGO	MINN KOTA	YAMAHA	IMEON ENERGY Your Power, Your Rules
Growatt powering tomorrow	Deye 德業	GOODWE YOUR SOLAR ENGINE	SOLAX POWER	invt
SOFAR SOLAR	SUNGROW	MPP Solar	solis	victron energy BLUE POWER

Cooperation

Disclaimer:
Polinovel has made this brochure as comprehensive and accurate as possible based on the current information. However, we reserve the right to modify data, parameters, and other information without further notice. Polinovel retains the right to the final interpretation of thie brochure.

Pursue A Green Life

Shenzhen Polinovel Tech Co., Ltd

Email: sales@polinovel.com
Website: www.polinovel.com
Address: Building 3, Vanke Timemark, 85 Longcheng Ave, Longgang Dist, Shenzhen, China