

PROFESSIONAL MANUFACTURER OF LITHIUM-ION BATTERY SOLUTIONS

Over 20 years experience in customization of lithium batteries
leading the new tendency of the industry.

SHENZHEN PKENERGY ENERGY CO., LTD

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CATALOGUE

Over 20 years experience in customization of lithium batteries,leading the new tendency of the industry.

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COMPANY PROFILE

SHENZHEN PKENERGY ENERGY CO., LTD, is a leading provider of custom lithium battery solutions and solar energy storage systems. With over 20 years of expertise in lithium battery customization, PKENERGY delivers a diverse range of high-quality, multi-category, multi-model, and multi-batch power solutions tailored to clients' unique project needs.

As a high-tech enterprise at the forefront of the green energy sector, PKENERGY has established a global footprint across more than 100 countries, supported by offices in Toronto, Canada, and Los Angeles, USA. The company proudly holds over 12 national patents in lithium battery technology and certifications including TUV, CE, EN62619, UL1973, and IEC62040, underscoring its commitment to quality and innovation.

PKENERGY has facilitated power upgrades for thousands of smart products through its advanced energy solutions and forged successful partnerships with over 10000 global clients. Together, PKENERGY and its partners drive mutual growth, technological innovation, and a sustainable energy future.



GREEN ENERGY, EASY LIFE.

MISSION

PROVIDE CONSUMERS WITH GREEN, ENVIRONMENT-FRIENDLY,
COST-EFFECTIVE NEW ENERGY PRODUCTS

VISION

BECOME A GLOBAL OUTSTANDING LARGE
BATTERY BRAND ENTERPRISE

CORE VALUE

DEDICATED, HONEST, COOPER-
ATIVE, HAPPY AND INNOVATIVE



WORKSHOP

Our workshop features advanced automated machinery and a dust-free environment, ensuring efficient, precise, and high-quality battery production. With well-organized production lines and trained staff, we guarantee stable delivery and strict quality control.

CERTIFICATIONS

We hold international certifications like CE, SGS, and UL, proving our batteries meet global standards for safety, performance, and environmental compliance, providing reliable solutions for our customers.

PKENERGY MILESTONES

(1998-2024)

1998

PKENERGY was established as a subsidiary of the PKCELL Group, focusing on the research and production of lithium batteries.

2006

The company obtained ISO9001 Quality Management System certification and officially launched its first rechargeable battery production line, laying a solid foundation for the development of lithium battery products.

2009

With PKCELL Group's successful entry into the international market, PKENERGY seized the opportunity to expand its presence in Europe, the Americas, Asia, Africa, and Oceania, achieving initial global market coverage.

2016

The Group established subsidiaries in Toronto, Canada, and Los Angeles, USA. The company rapidly expanded in scale, solidifying PKENERGY's position as a leading global battery brand.

2018

PKENERGY increased its R&D efforts in lithium batteries, achieving significant technological breakthroughs. The company received multiple industry innovation awards over consecutive years, becoming a leader in high-energy, high-value, and high-quality batteries.

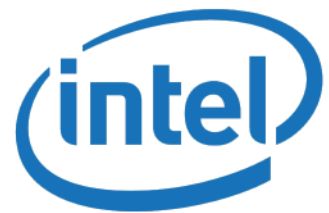
2021

PKENERGY established a High-Rate Lithium-Ion Battery Engineering Technology Research Center, further strengthening its technological leadership in the lithium battery industry.

2024

PKENERGY continued to drive innovation and market expansion, successfully developing a new generation of wide-temperature lithium batteries. These products are widely applied across various fields, further consolidating the company's leading position in the global lithium battery market.

COOPERATION PARTNERS





Full-Process Service

A complete closed-loop service covering R&D, design, production, testing, and sales.



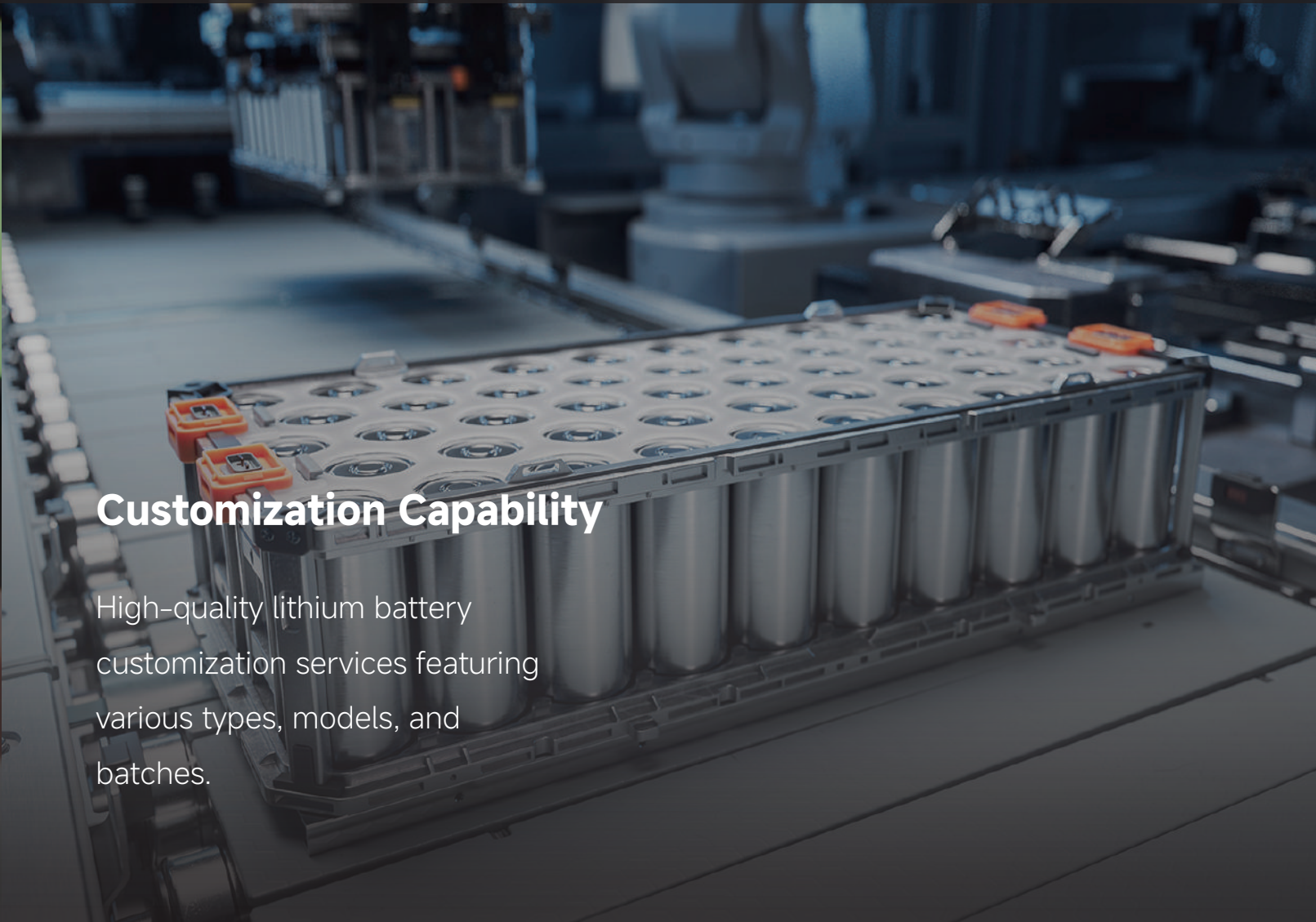
Quality Assurance

Compliance with international standards such as UL, CE, and ISO to ensure product performance and safety.



R&D Strength

Professional R&D team, advanced production equipment, and technical certifications.



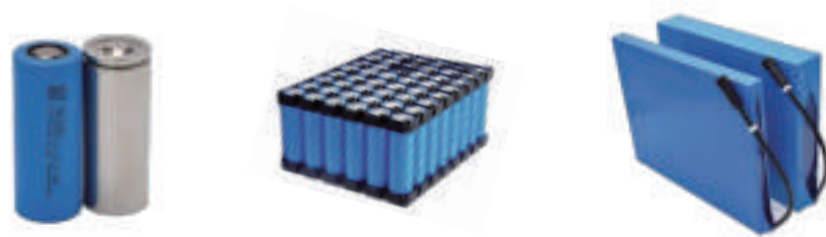
Customization Capability

High-quality lithium battery customization services featuring various types, models, and batches.

Li ion Battery Cells & Packs



Cell-Module-Pack



Li ion Battery Cells & Packs

PKNERGY offers lithium-ion cells and custom battery packs, providing flexible customization options to meet the specific requirements of your products.

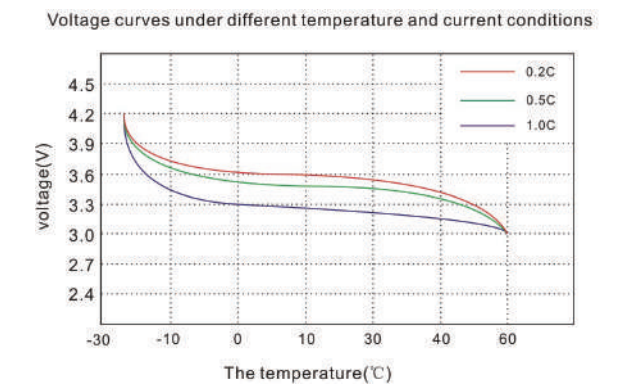
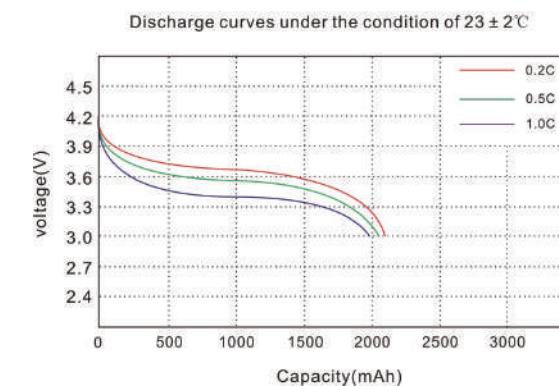
PKNERGY



Pknergy's Li ion Battery Cells & Packs Advantages

With a range of shapes and sizes, our solutions simplify your application design. Delivering reliable and long-lasting power across diverse temperature environments.

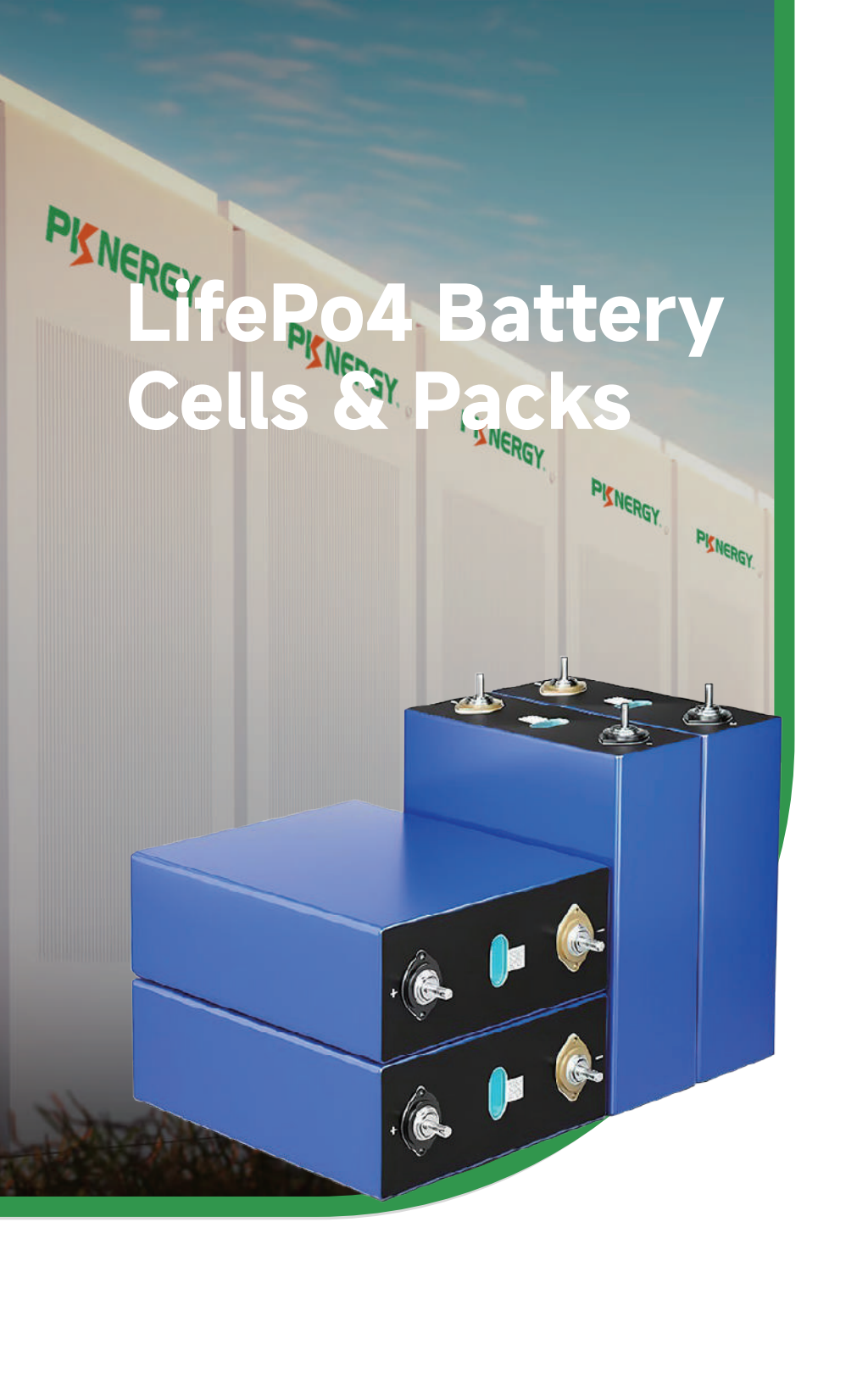
- High Energy Density
- Long Cycle Life
- Wide Range of Operation Temperature -40°C ~85°C
- High Flexibility for Application Design



Type	Model (ICR)	Voltage (V)	Capacity (mAh)	Dimension (mm)	Weight Approx (g)
Capacity Type	18350	3.7	900	18.3*35.2	21
	18500	3.7	1600	18.3*50.2	36
	18620	3.7	2000	18.3*62.2	40
	18650	3.7	2600	18.5*65.2	45
	18650	3.7	2000	18.5*65.2	40
	21700	3.7	5000	21.5*70.2	50
	22430	3.7	2000	21.5*43.2	45
	22500	3.7	2400	22.3*50.2	46
	22650	3.7	3000	22.3*65.2	48
	26350	3.7	2000	26.5*35.2	48
	26500	3.7	3200	26.3*50.2	52
	26650	3.7	5000	26.3*65.2	56
	26650	3.7	4500	26.3*65.2	55
	32550	3.7	5000	32.5*60.2	52
	32600	3.7	5500	32.5*60.5	56
	32650	3.7	6500	32.3*65.2	58
	34600	3.7	7000	34.3*60.2	60
5C/10C Discharge	14250	3.7	240	14.2*25	10
	14500	3.7	650	14.2*50.2	18.5
	14650	3.7	900	14.2*65.2	20
	16340	3.7	600	16.8*34	17
	16500	3.7	800	16.8*50.2	18
	18350	3.7	700	18.3*35.2	18
	18500	3.7	1100	18.3*50.2	38
	18650	3.7	1500	18.3*65.2	40
	18650	3.7	2200	18.5*65.2	43
	18650	3.7	2000	18.5*65.2	42
	21700	3.7	3000	21.5*70.2	50
	22650	3.7	2000	23.5*65.2	48
	26500	3.7	2000	26.3*50.2	52
	26650	3.7	3400	26.5*65.2	56



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LifePo4 Battery Cells & Packs

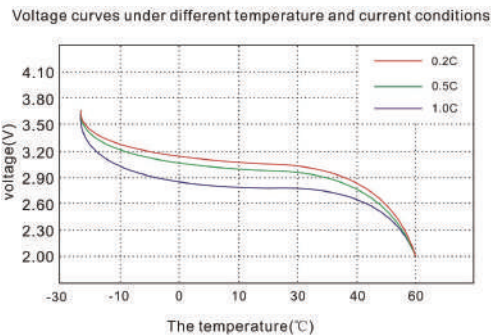
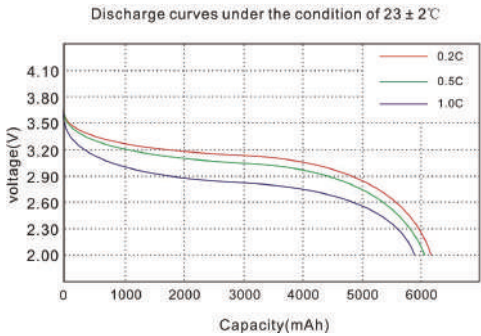
Lithium Iron Phosphate (LiFePO4) batteries are known for their exceptional safety, long lifespan, and reliability. Available as standalone cells or as integrated packs, they cater to a wide range of applications, from electric vehicles to renewable energy storage. The flexibility of LiFePO4 battery packs allows for custom configurations to meet specific voltage, capacity, and power requirements.



LifePo4 Battery Cells & Packs

LiFePO4 batteries offer many advantages over traditional lead-acid batteries. LiFePO4 batteries are known for their outstanding safety performance, with excellent thermal stability and resistance to overheating or combustion, making them one of the safest battery chemistries available.

- High Energy Density
- Long Lifespan
- High Safety
- Environmentally Friendly

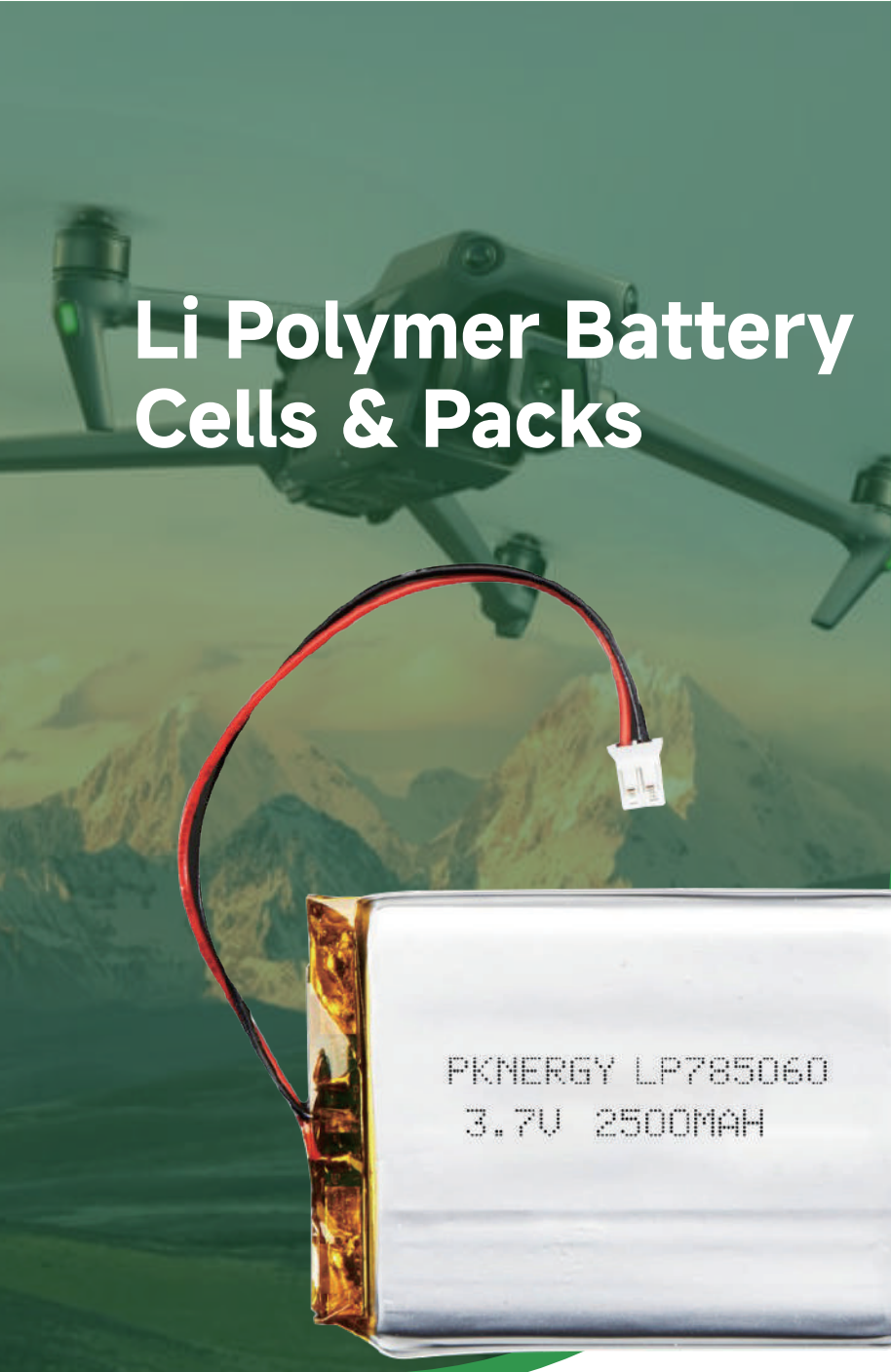


Battery Type	Model	Nominal Voltage (V)	Nominal Capacity (Ah)	Charging Current		Discharging Current			Dimension (mm)	Weight Approx (g)
				Standard	Max	Standard	Fast	Max		
Cylindrical Li-FePO4 Battery	IFR10440-200mAh	3.2	200	0.5C	1C	0.5C	1C	3C	φ10.3*44.2	7
	IFR14500-600mAh	3.2	600	0.5C	1C	0.5C	1C	3C	φ14.2*50.2	17
	IFR14650-800mAh	3.2	800	0.5C	1C	0.5C	1C	3C	φ14.2*65.3	21
	IFR18500-1000mAh	3.2	1000	0.5C	1C	0.5C	1C	3C	φ18.1*50.2	32
	IFR18650-1500mAh	3.2	1500	0.5C	1C	0.5C	1C	3C	φ18.3*65.5	42
	IFR22650-2000mAh	3.2	2000	0.5C	1C	0.5C	1C	3C	φ22.5*65.3	62
	IFR32600-4000mAh	3.2	4000	2C	1C	0.5C	1C	3C	φ32.5*60.5	125
	IFR32650-6000mAh	3.2	6000	1C	1C	0.5C	1C	3C	φ32.3*65.2	141
	IFR32700-7000mAh	3.2	7000	2C	1C	0.5C	1C	3C	φ32.3*70.2	156
	IFR42110-11000mAh	3.2	11000	1C	1C	0.5C	1C	3C	φ42.5*110.5	325
	IFR42120-13000mAh	3.2	13000	2C	1C	0.5C	1C	3C	φ42.5*120.5	355
	IFR61300-50000mAh	3.2	50000	1C	1C	0.5C	1C	3C	φ61*300	2000
	IFR73435-100000mAh	3.2	100000	2C	1C	0.5C	1C	3C	φ73*435	4000

Battery Type	Model	Nominal Voltage (V)	Nominal Capacity (Ah)	Charging Current		Discharging Current		Dimension (mm)	Weight Approx (g)
				Standard	Max	Standard	Max		
Prismatic Li-FePO4 Battery	LFP20-20Ah	3.2	20000	0.2C	0.5C	0.5C	1C	10*117*169	625±10
	LFP25-25Ah	3.2	25000	0.2C	0.5C	0.5C	1C	10*94*249	680±18
	LFP30-30Ah	3.2	30000	0.2C	0.5C	0.5C	1C	75*159*270	700±18
	LFP50-50Ah	3.2	50000	0.2C	0.5C	0.5C	1C	40*149*102	1330±50
	LFP50F-50Ah	3.2	50000	0.2C	0.5C	0.5C	1C	27*148*129	1050±100
	LFP50K-50Ah	3.2	50000	0.2C	0.5C	0.5C	1C	29*135*185	1395±50
	LFP50M-50Ah	3.2	50000	0.2C	0.5C	0.5C	1C	11*165*260	1330±100
	LFP80-82Ah	3.2	82000	0.2C	0.5C	0.5C	1C	36*130*170	1680±50
	LFP90-90Ah	3.2	90000	0.2C	0.5C	0.5C	1C	36*130*200	1994±50
	LFP100-100Ah	3.2	100000	0.2C	0.5C	0.5C	1C	48*173*133	2110±100
	LF100L-100Ah	3.2	100000	0.2C	0.5C	0.5C	1C	36*130*200	1980±50
	LFP105-105Ah	3.2	105000	0.2C	0.5C	0.5C	1C	50*160*118	1980±100
	LFP105K-105Ah	3.2	105000	0.2C	0.5C	0.5C	1C	54*173*113	1980±100



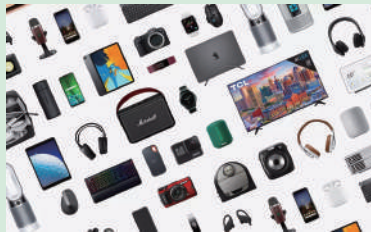
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Li Polymer Battery Cells & Packs

Li Polymer Battery Cells & Packs

PKNERGY offers Li-Polymer Batteries over 5000 models, thickness range from 0.4mm to 14mm, capacity range from 8mAh to 10000mAh+. With Round,Ultra-Thin, Cylindrical in different shape, making them suitable for a variety of applications where space and weight are critical factors.

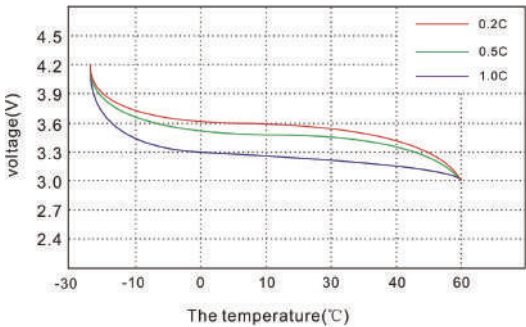


Advantages of Pknergy's Li Polymer Battery Cells & Packs

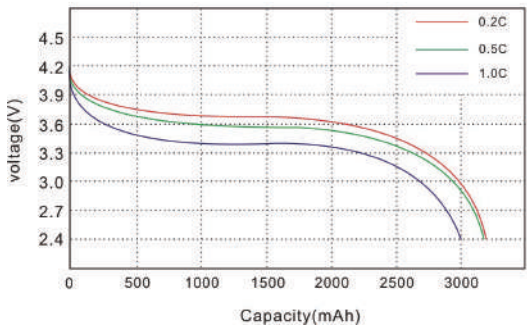
LiPo batteries can be made in different shapes and sizes to fit specific design requirements, offering greater flexibility in product development.Battery customized exactly to your demands!

- Lightweight and Compact
- Flexible Shapes and Sizes
- High Energy Density
- Safety and Stability

Voltage curves under different temperature and current conditions



Discharge curves under the condition of 23 ± 2°C



Model	Noninal Capacity (mAh)	Capacity (mAh)	Inner Resistance (mΩ)	Dimension (mm)			Working Temperature (°C)
261012PL	12	3.7	1550	2.6	10	12	-10~+45
601015PL	50	3.7	380	6	10	15	-10~+45
501020PL	70	3.7	290	5	10	20	-10~+45
401024PL	67	3.7	330	4	10	24	-10~+45
501024PL	80	3.7	270	5	10	24	-10~+45
401017PL	40	3.7	470	4	10	17	-10~+45
481027PL	100	3.7	220	4.8	10	27	-10~+45
301030PL	60	3.7	350	3	10	30	-10~+45
501050PL	200	3.7	150	5	10	50	-10~+45
601119PL	95	3.7	240	6	11	19	-10~+45
401230PL	120	3.7	200	4.5	12	30	-10~+45
302023PL	100	3.7	240	3	20	23	-10~+45
602023PL	220	3.7	140	6	20	23	-10~+45
602024PL	250	3.7	120	6	20	24	-10~+45
402025PL	150	3.7	160	4	20	25	-10~+45
602025PL	250	3.7	120	6	20	25	-10~+45
402030PL	180	3.7	140	4	20	30	-10~+45
552035PL	350	3.7	98	5.5	20	35	-10~+45
503035PL	500	3.7	90	5	30	35	-10~+45
603048PL	850	3.7	70	6	30	48	-10~+45





Sodium-ion Battery Cells & Packs



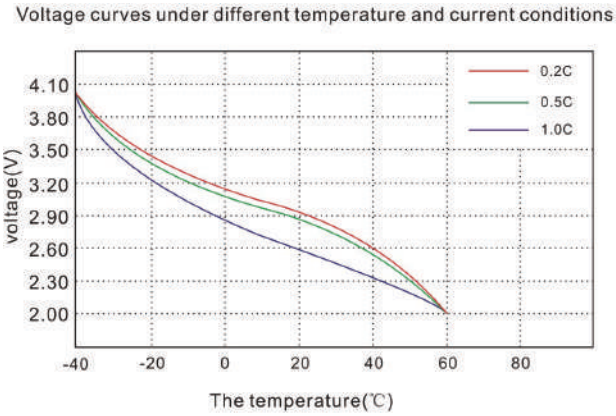
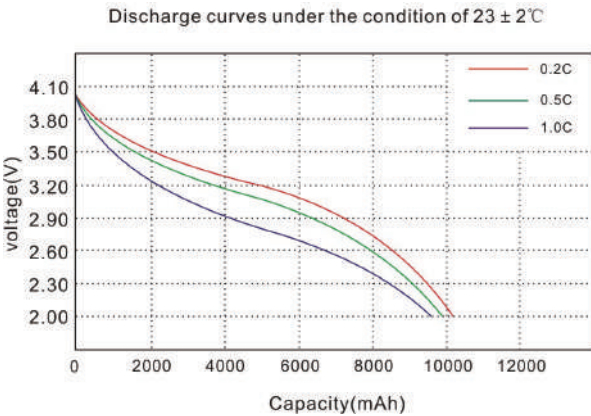
Sodium-ion Battery Cells & Packs

Sodium-ion batteries have good safety and strong low-temperature performance, and are particularly suitable for large-scale energy storage, low-cost electric vehicles and applications in cold regions.



Advantages of Pkenergy's Sodium-ion Battery

- Readily available
- High rate charge & discharge
- Low-temperature performance
- Safety
- -40°C~60°C Low-temperature performance
- Low impact on the environment



Product Model	Rated Capacity	Energy Density	Voltage Range	Maximum Discharge Rate	Cycle Life	Technical Features	Application Field
Pk-na-50Ah	50Ah	130Wh/kg	1.5~4V	6C	3000 (0.5C@70%)	Capacity Type	Special Vehicles
Pk-na-70Ah	70Ah	130Wh/kg	1.5~4V	6C	3500 (0.5C@80%)	Capacity Type	Communication Base Stations & Backup Power
Pk-na-70Ah	70Ah	130Wh/kg	1.5~4V	6C	3500 (0.5C@80%)	Power Type	Special Vehicles
Pk-na-80Ah	80Ah	145Wh/kg	1.5~4V	6C	3500 (0.5C@80%)	Long Cycle Life & High Capacity	Communication Base Stations & Backup Power
Pk-na-80Ah	80Ah	140Wh/kg	1.5~4V	6C	3500 (0.5C@80%)	Long Cycle Life & High Capacity	Communication Base Stations & Backup Power
Pk-na-100Ah	100Ah	150Wh/kg	1.5~4V	6C	3500 (0.5C@80%)	Long Cycle Life & High Capacity	Communication Base Stations & Backup Power
Pk-na-100Ah	160Ah	110Wh/kg	1.5~3.8V	6C	8000 (0.5C@70%)	Long Cycle Life & High Capacity	Energy Storage



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Special Batteries



Special Battery

Pknergy offers customized battery solutions, including curved battery, high rate discharge batteries, Ultra-wide temperature battery, high temperature lithium batteries, low temperature batteries, and ultra thin batteries. These solutions are designed to meet specific application needs, providing reliable and efficient power for various industries, from high-performance devices to extreme environmental conditions.



Advantages of Pknergy’s Special Battery

- Flexible Design
- High Energy Density
- Low Self-Discharge Rate
- Lightweight
- Fast Charging

Applications

Curved Battery



Customized electronic devices



Medical equipment



Smartwatch

High Rate Discharge Batteries



Motorized Scooter



Electric Motorcycle



Electric Drill

High Temperature Lithium Batteries



Electric Vehicle



Monitoring Instruments



High Temperature Sensors

Low Temperature Batteries



Snowmobile



Electric Ski Equipment



Meteorological Monitoring Stations

Ultra-Thin Batteries



Smartwatch



Portable Wireless Devices



Medical Sensors



Power your drones with our high-performance lithium polymer batteries designed for superior flight time and reliability. Our lightweight, high-density batteries ensure optimal performance for aerial photography, surveillance, and industrial inspections

Drones Power Solution

Advantages:

- Long flight time with high energy density.
- Fast charging and stable power output.
- Lightweight for improved maneuverability and efficiency.

Features:

- High discharge rate for demanding applications.
- Safe with advanced protection circuitry.
- Wide operating temperature range for various conditions.

Basic Specifications

- Voltage: 3.7V, 7.4V, 11.1V, 14.8V (Customizable)
- Capacity: 1000mAh to 20000mAh
- C Rating: 10C - 50C

Application Scenario



Military Drones



Agricultural Drone



Photographic Drone



Commercial Drone



Cargo Drone



Ensure continuous operation for your security systems with our reliable lithium batteries, designed for surveillance cameras, alarm systems, and other critical security applications.

Security Power Solution

Advantages:

- Stable and long-lasting power.
- Low self-discharge for long-term storage.
- Reliable performance in cold climates with low-temperature resistance.

Features:

- Compact design for easy integration.
- Overcharge, over-discharge, and short-circuit protection.
- Consistent power output for surveillance applications.

Basic Specifications

- Voltage: 3.7V, 12V, 24V (Customizable)
- Capacity: 5Ah to 50Ah
- C Rating: >1C - 3C
- Working Temperature: 0°C - 45°C



Monitoring Equipment



Access Control



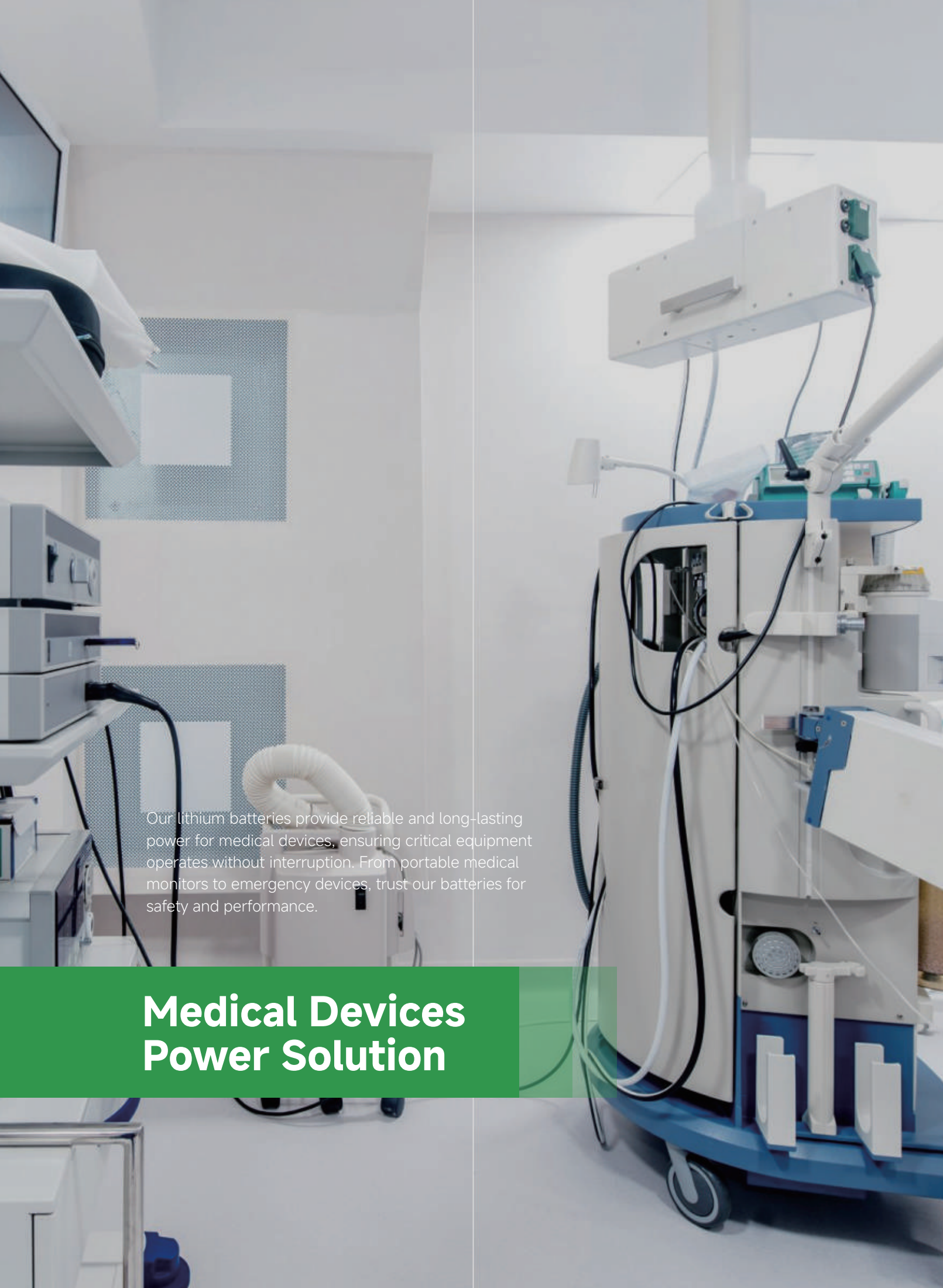
Alarm System



Sensor



Telecommunication equipment



Our lithium batteries provide reliable and long-lasting power for medical devices, ensuring critical equipment operates without interruption. From portable medical monitors to emergency devices, trust our batteries for safety and performance.

Medical Devices Power Solution

Advantages:

- High reliability for life-saving medical devices.
- Long cycle life for minimal maintenance.
- Lightweight, easy to integrate into portable equipment.

Features:

- Safe with built-in protection circuitry.
- Fast discharge rate for medical instruments.
- Temperature and shock-resistant for medical environments.

Basic Specifications

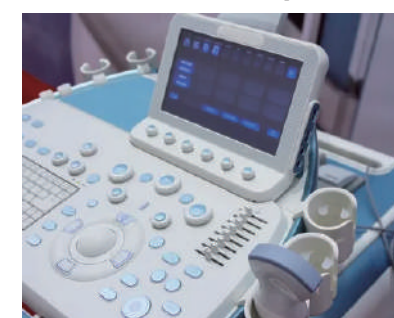
- Voltage: 3.7V, 7.4V, 11.1V, 24V (Customizable)
- C Rating: 1C-3C
- Capacity: 500mAh to 10000mAh



Ventilator / Respirator



Electronic Blood Pressure Monitor



Diagnostic Equipment



Syringe Pump



Portable Ultrasonograph



Power up your consumer electronics with our high-performance lithium batteries. Ideal for smartphones, laptops, wearables, and other devices, our batteries deliver fast charging, extended usage times, and enhanced safety.

Consumer Battery

Advantages:

- Extended usage time for portable devices.
- Fast charging for convenience and efficiency.
- Compact and lightweight for easy integration.

Features:

- High energy density for longer battery life.
- Suitable for various consumer electronics.
- Safe with protection against overcharge and overheating.

Basic Specifications

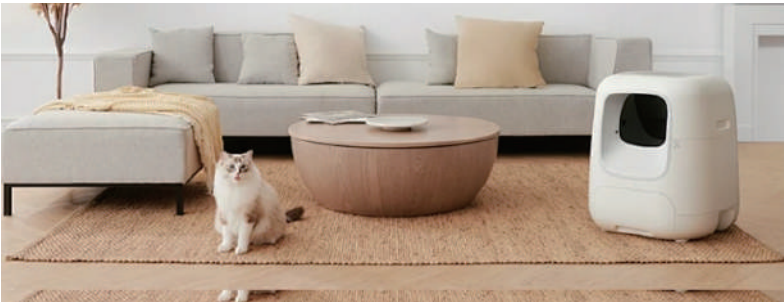
- Voltage: 3.7V, 7.4V, 11.1V, 24V (Customizable)
- C Rating: 0.5C-5C
- Capacity: 500mAh to 10000mAh



Ventilator / Respirator



Diagnostic Equipment



Electric Litter Pan



Electric Toothbrush



Portable Ultrasonograph



Pknergy offers energy storage and management systems to support a wide range of lighting solutions. These applications include both traditional grid-powered systems as well as solar and battery-operated lighting options. The aim is to deliver efficient, sustainable, and cost-effective lighting solutions for diverse environments. Key applications include solar street lights, garden lighting, garage lights, and more.

Solar Lighting Power Solution

Advantages:

- Long-lasting power for lighting systems.
- Excellent performance in extreme temperatures.
- Safe and efficient for outdoor and emergency use.

Features:

- Deep discharge capability for prolonged use.
- Overcharge protection for safety.
- Ideal for solar-powered lighting.

Basic Specifications

- Voltage: 3.7V, 12V, 24V
- Capacity: 500mAh to 20000mAh
- Cycle life: > 1500 cycles



Headlamp



Garden Lighting



Street Lighting



Garage Light



From industrial robots to service robots, our high-discharge lithium batteries are designed to address the critical challenge of balancing energy density with safety. Robots require compact and lightweight batteries that can store enough energy to power complex movements and sensors for extended periods. However, increasing energy density can raise safety concerns, such as overheating or fire risks. Our batteries are engineered to maximize energy storage while ensuring high safety standards.

Robots Power Solution

Advantages:

- High discharge rate for continuous, reliable operation.
- Compact size ideal for space-constrained robotic applications.
- Long cycle life for reduced maintenance and increased reliability.

Features:

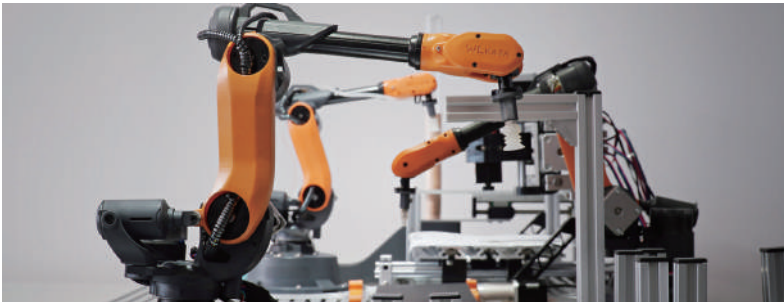
- Optimized for high-current discharge to support demanding robotic functions.
- Safe, reliable performance for use in industrial settings.
- Resistant to temperature fluctuations and vibration, ensuring stability in harsh environments.

Basic Specifications

- Voltage: 7.4V, 14.8V, 24V-48V (Customizable)
- Capacity: 10Ah - 100Ah
- Cycle life: > 3000 cycles
- Communication design: RS485, RS232, CANBUS etc
- According to the required voltage, capacity and size to design the power solution



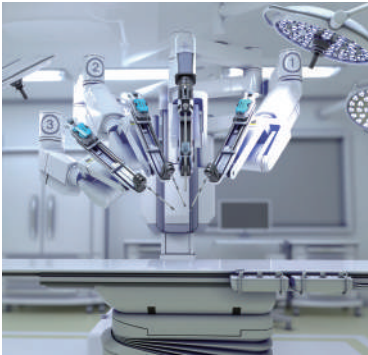
Cleaning Robot



Industrial Robots



Delivery Robot



Medical Robots



Food Delivery Robot



Upgrade to a more advanced and environmentally-friendly power solution with our lithium batteries designed to replace traditional lead-acid batteries. Engineered for seamless integration, our lithium-based systems offer superior charging speeds, extended cycle life, and a significantly reduced weight profile, making them a more efficient and sustainable alternative.

Lead-Acid Replacement Battery for RV and Golf Car

Advantages:

- Lighter, more efficient alternative to lead-acid batteries.
- Faster charging and longer life cycle.
- Minimal maintenance and more eco-friendly.

Features:

- Higher energy density than lead-acid.
- Superior performance in cold and hot temperatures.
- No need for regular water topping or maintenance

Basic Specifications

- Voltage: 12V, 24V, 48V
- Capacity: 10Ah to 300Ah
- Cycle life: > 6000 cycles



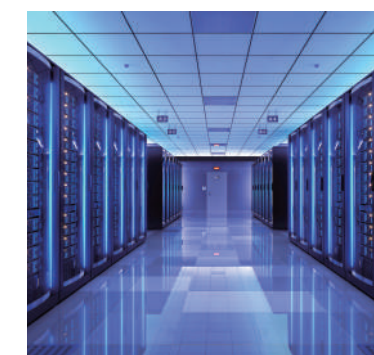
Electric Forklift



Energy Storage



Golf Car



Data Center



Floor Scrubber

E-Mobility Battery for E-Bikes, Scooters, and EVs

Pknergy's Electric Mobility Battery Solutions offer efficient and sustainable power for a wide range of electric transportation systems. Designed for reliability, long range, fast recharge times, and durability, these batteries are ideal for various mobility applications, including E-bike Batteries, E-scooter Batteries, Electric Balance Car Batteries, and Electric Boat Batteries etc.



Industrial Battery for Heavy Machinery and Equipment

Pknergy industrial batteries are engineered to power heavy-duty machinery and equipment. With high energy density, robust build, and superior cycle life, our batteries ensure uninterrupted power for industrial applications, they are widely used in automation equipment, power tools, electric forklifts and other industries.



Advantages:

- Lighter, more efficient alternative to lead-acid batteries.
- Faster charging and longer life cycle.
- Minimal maintenance and more eco-friendly.



Advantages:

- Robust performance in industrial applications.
- High energy density for energy-intensive machinery.
- Long cycle life with minimal maintenance.



Features:

- Higher energy density than lead-acid.
- Superior performance in cold and hot temperatures.
- No need for regular water topping or maintenance

Features:

- Built for forklifts, cranes, and other industrial tools.
- Operates in extreme temperatures for reliable performance.
- Safe with thermal and current protection.



PKENERGY's Commitment to ESG: Building a Sustainable Future

At PKENERGY, we are deeply committed to Environmental, Social, and Governance (ESG) principles, integrating sustainability into every aspect of our operations. Our mission is to power the world with innovative energy solutions while contributing to a greener, more equitable future.