

ROYPOW TECHNOLOGY CO., LTD. has a policy of improving products continuously. All the information in this catalogue is provided for reference only. We reserve the right to make revisions as well as product alterations and improvements at any time without prior notice. Trademarks are the property of ROYPOW TECHNOLOGY CO., LTD. or their respective owners. Technical data and illustrations are not binding. We assume no liability for misprints.

Version: December 17, 2024, LiFePO₄ Batteries for Industrial Applications



ROYPOW Technology Co., Ltd.

Tel: +86 (0)752-327 9099

Email: sales@roypow.com
service@roypow.com
marketing@roypow.com

Web: www.roypow.com

Add: ROYPOW Industrial Park, No.16, Dongsheng South Road, Chenjiang Street, Zhongkai High-Tech District, Huizhou City, Guangdong Province, China

ROYPOW (USA) Technology Co., Ltd.

Tel: +1 512 688 5555 (Texas Office)

Email: sales@roypowusa.com

Service Support: +1 626 269 0547

Email: service@roypowusa.com

Web: www.roypow.com

Head Office: 5901 Triumph St, Commerce, CA 90040, USA

Texas Office: 2350 Campbell Creek Blvd #100 Richardson, TX 75082, USA

Florida Office: 277 Douglas Avenue, Unit 1004, Altamonte Springs, FL 32714, USA

Indiana Office: 5545 W Raymond St, Ste H Indianapolis, IN 46241, USA

Georgia Office: 1150 Cobb International PI NW Ste E, Kennesaw, GA 30152, USA

ROYPOW Technology UK Limited

Tel: +44 (0) 7918 955 940

Email: sales.uk@roypow.com

Add: Regus Green Park, 200 Brook Dr, Reading RG2 6UB, UK

ROYPOW Battery Technology (Pty) Ltd

Email: sales.za@roypow.com

Tel: +27 69 89 55555

Add: 53 Lake Rd, Longmeadow Business Estate, Edenvale, 1609, South Africa



ROYPOW (Europe) Technology B.V.

Email: sales.eu@roypow.com

Tel: +31 702 001 114

Web: www.roypoweuropa.com

Add: Seattleweg 1, 3195 ND, Pernis, The Netherlands

ROYPOW Australia Technology Pty Ltd

Email: sales@roypowtech.com.au

Tel: +61 29185 0814

Web: www.roypowtech.com.au

Add: Suite 803a, 18 Orion Road, Lane Cove, NSW, 2066, Australia

ROYPOW Technology GmbH

Tel: +49 (0) 176 2358 8956

Email: sales.de@roypow.com

Web: www.roypow.gmbh

Add: Rosa-Parks-Straße 4, 64295-Darmstadt, Germany

ROYPOW株式会社

Tel: +81 090 7092 6969

Email: info@roypow.co.jp

Web: www.roypow.co.jp

Add: 〒271-0094 千葉県松戸市上矢切299-7

ROYPOW Technology Co., Ltd (Korea)

Tel: 1555-2016

Email: sales.kr@roypow.com

Add: 2405, GIDC Gwangmyeong station A Dong, 43 Iljik-ro, Gwangmyeong-si, Gyeonggi-do, Korea



LiFePO₄ Batteries

for Industrial Applications

Drop-In Lithium-Ion
Replacement for
Lead Acid Batteries



Forklifts:

Toyota Hyster Crown

Clark Hyundai YALE

Linde Doosan Jungheinrich

AWPs:

JLG MEC CTE

SKYJACK Genie

Snorkel Mantall

Cleaning Equipment:

Tennant Nilfisk Karcher Hako

Clarke IPC ICE NSS Betco

Minuteman PowerBoss Eureka



sales@roypow.com

www.roypow.com



ROYPOW

For One-stop New Energy Solutions

- R&D, manufacturing and sales of motive power systems and energy storage systems as one-stop solutions
- Fully automatic production lines, a full range of test equipment and an advanced MES
- Covering Low-Speed Vehicles' Batteries, Industrial Batteries, as well as Residential ESS, Commercial & Industrial ESS, and Mobile ESS
- Self-development of power electronics technologies, including PCS, BMS, and EMS



750+ Employees
190+ R&D People
105,000 m² Headquarters Floor Area
2,500 m² Testing Center
202 Patents

Quality Control Certificates:

- ✓ Environmental Management System: ISO 14001:2015
- ✓ Occupational Health and Safety Management System: ISO 45001:2018
- ✓ Quality Management System: ISO 9001:2015, IATF16949:2016
- ✓ Information Security Management System: ISO/IEC 27001:2022
- ✓ Social Accountability Management System: SA8000:2014
- ✓ Hazardous Substance Process Management: IECQ QC 080000

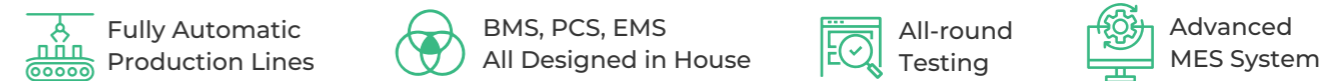


Product Certifications:

UL 1973, UL 9540A, UL 9540, UL 2580, UL 2271, UL 1741			FCC, IEC/EN 61000-6, BS EN IEC 61000-6
IEEE 1547			IEC 60730, ISO 13849-1
IEC 62619			UN 38.3
EN 62477, EN 62040, (EU) 2023/1542, EN 62109-1, EN 62109-2			RoHS Directive 2011/65/EU & (EU) 2015/863

R&D and Manufacturing Highlights

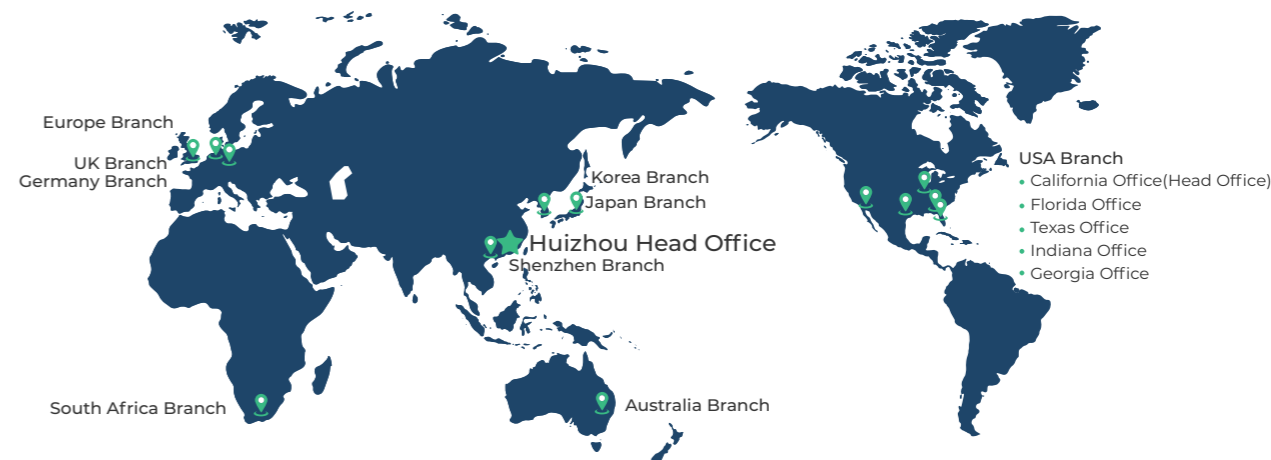
As a result of these investments, ROYPOW is capable of "end-to-end" integrated delivery, making our products out-perform the industry norms.



Global Sales and Service Network



ROYPOW has comprehensively unfolded its overseas market layout to ensure the localization of R&D, manufacturing, marketing and service, becoming one of your most reliable and valuable partners.



Upgrading to New Technology, with Our Turnkey Solutions.

With years of dedication to new energy solutions, we are proud to offer customers professional solutions for:

- Low-speed Vehicle Batteries
- Battery Systems for Off-highway Applications
- Residential Energy Storage Systems
- Mobile Energy Storage Systems
- Industrial Batteries
- Battery Systems for Emerging Applications
- Commercial & Industrial Energy Storage Systems
- Chargers



New Technology. Create Great Value for Your Business

Converting from lead-acid to lithium-ion is easy and cost-effective and increases the productivity of the fleets and the operator.



Benefits of Lithium-ion Batteries

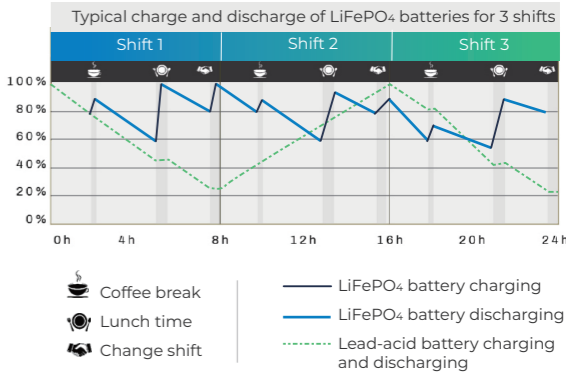


Lead-acid	LiFePO ₄ battery	
 3 years design life	 up to 10 years design life Longer life 3 to 4 times lead-acid lifespan	<ul style="list-style-type: none">✓ Reduces overall battery investment✓ Eco-friendly✓ Minimize the need for spares
 Frequent maintenance	 No maintenance 0 maintenance no need for regular filling of distilled water and electrolyte	<ul style="list-style-type: none">✓ No regular filling of distilled water✓ Saving costs on labor and maintenance✓ Less unplanned downtime and improved productivity✓ No frequent battery replacements
 1-2 years warranty	 5 years warranty Extended warranty bring you peace of mind	<ul style="list-style-type: none">✓ Durable and reliable✓ Reduces maintenance and labor costs✓ Quality guarantee

Reduce Downtime, Increase Equipment Availability

In day-to-day operations, the battery can be charged even during short breaks, such as taking a rest or changing shifts, effectively increasing productivity.

- ✓ Reduces the need for a full charge every time.
- ✓ Eliminates the need for frequent time-consuming battery swaps.
- ✓ Eliminates the risk of battery-changing accidents.
- ✓ Opportunity charge during breaks, lunch and at shift changes. Charge anytime equipment is not in use.



Rapid Charging

Whether you have a single-shift or a large fleet working 24/7, fast charge is one of the most important advantages.



TIPS

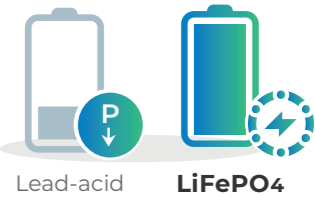
Why choose LiFePO₄ batteries for industrial applications?

There are a few lithium-ion chemistries to choose from. ROYPOW uses LFP or Lithium Iron Phosphate, one of the most thermally stable and safe lithium-ion chemistries for industrial applications.

LFP offers longer life, is more energy-dense, more stable, is more compact, and weighs less than lead-acid. Our battery packs are sealed units requiring no daily or weekly watering and no maintenance. LFP is ideal for batteries used in industrial applications.

Consistent Power

Lithium-ion batteries deliver consistently high performance, which maintains greater productivity even toward the end of a shift.



Eliminate the Need for a Dedicated Charging Area and Frequent Battery Swaps

- ✓ Minimize the need to buy, store and maintain spares.
- ✓ Eliminate the cost and storage space required for additional lead-acid batteries.
- ✓ No gassing, no ventilation system needed when charging. No hazardous acid spills.

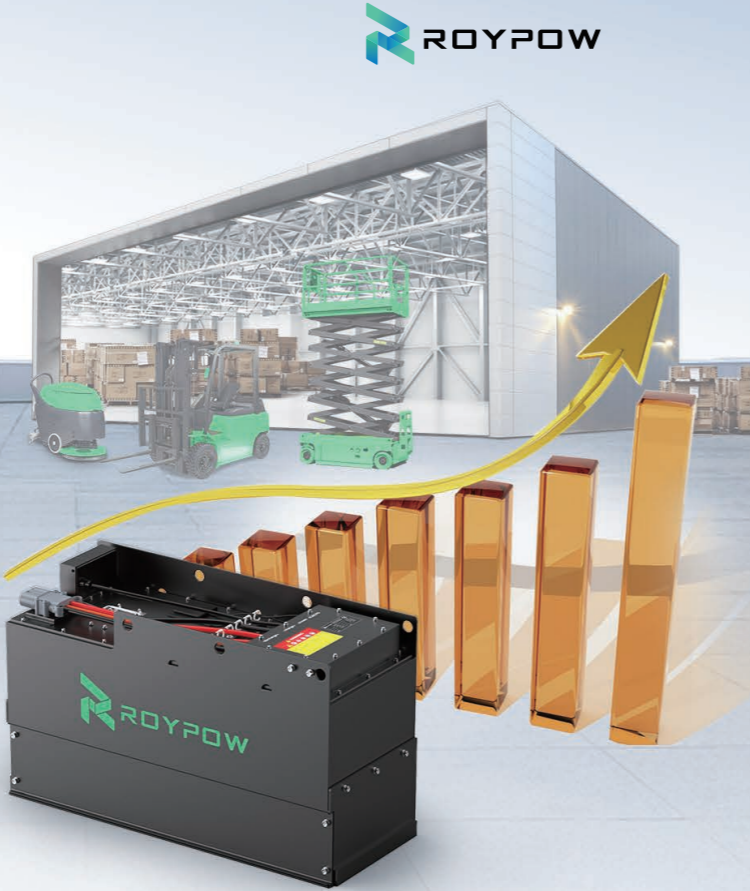


Small Investment, Big Return

Converting your battery to lithium-ion may require a higher initial investment, but its ongoing savings on energy, equipment, labor and downtime will dramatically lower your total cost of ownership (TCO).

The LiFePO₄ batteries can offer you...





























- ✓ Longer life reduces overall battery investment.
- ✓ No maintenance saves labor and maintenance costs.
- ✓ No gas or acid spills, avoids the space, equipment and running costs of a battery room and ventilation system.
- ✓ Energy saving and less downtime, improve productivity.



5-year Cost Comparison to Increase Your Overall Return on Investments.

Save Up to **70%**
Expenses in 5 Years

Below is the 5-year expenditure table comparing ROYPOW LiFePO₄ batteries with lead-acid batteries.

Purchases over 5 Years	Lead-acid Battery					LiFePO ₄ Battery	
Battery cost						5yr	
Maintenance						5yr	/
Electricity waste						5yr	/
Installation						5yr	
Shipping						5yr	

Remark: Actual costs may vary according to local conditions.

ROYPOW Batteries with Smart & Integrated Systems

Provide exceptional performance to get the job done and improve your productivity, which means fewer hours of unplanned downtime and more productive hours on your work.

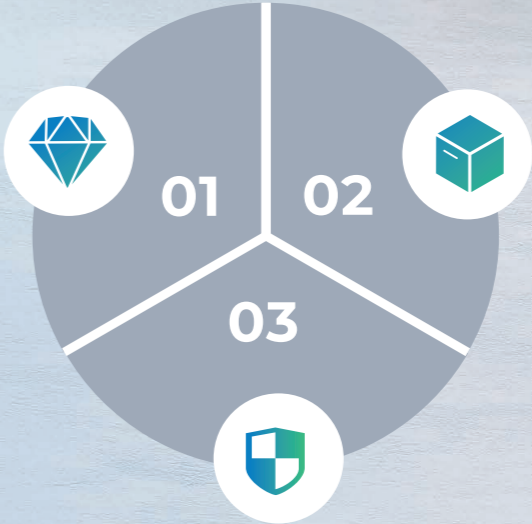
0 Maintenance
Up to **3,500+** Cycle Life

5_{yr} Warranty
Up to **10**_{yr} Design Life



Durable

ROYPOW batteries have an IP65 ingress rating. They will provide fast lifting and travel speeds at all levels of discharge, under all-weather working conditions.



4G Modules (for Forklift Batteries)

4G modules are for remote monitoring of the battery SOC, temperature, as well as diagnosis and remote software upgrades. Solve software problems in real time.

Built-in Protection

Intelligent BMS is for automatic cell balancing and advanced battery management. The LiFePO₄ batteries have greater thermal and chemical stability.

For AGVs and AMRs

Durable, stable, and safe. Suitable for various operation applications and improve working efficiency.



For Forklifts

Specially designed, smart, cost-effective. Ideal for multi-shift operations.



For Aerial Work Platforms

High consistent performance and maintenance free for safe and easy aerial work.



For Floor Cleaning Machines

Hassle-free, cost-effective, and good for you and the planet.



Automotive-grade
Battery Manufacturing

To build a world-renowned lithium-ion battery brand and provide better solutions for you.



LiFePO₄ Batteries for AGVs and AMRs

Always sufficient power for your AGVs and AMRs.

Pairing your AGVs and AMRs with ROYPOW lithium batteries that are maintenance-free, safe, and high-performing is a great way to boost automation efficiency and productivity, whether in manufacturing, warehousing, or logistics operation.



Specifications

ROYPOW

Model	Nominal Voltage	Nominal Capacity	Nominal Energy	Cycle Life	Dimensions (L x W x H)	Weight lbs. (kg)	Continuous Discharge Current	Peak Discharge Current	Casing Material	IP Rating
S5130A	51.2 V	30 Ah	≥1.536 kWh	>3,500 times	11.81 x 7.87 x 7.28 inch (300 x 200 x 185 mm)	36.38±2.2 lbs (16.5±1 kg)	30 A	60A (120 S)	Steel	IP67
S5130B		30 Ah	≥1.536 kWh		12.99 x 7.87 x 7.15 inch (330 x 200 x 181.5 mm)	28.66±2.2 lbs (13±1 kg)	30 A	60A (120 S)		IP67
Working Temperature Range		Charge -4°F~131°F (-20°C ~ 55°C)		Discharge -4°F~131°F (-20°C ~ 55°C)		Storage (1 month) -4°F~131°F (-20°C ~ 55°C)		Storage (1 year) 32°F~95°F (0°C~35°C)		

An Unmatched Power with High Compatibility
for Multi-shift Applications.

Powerful and reliable, our batteries boost efficiency in material handling. Suitable for applications like logistics, manufacturing, daily goods transporting, etc.



ROYPOW delivers solutions for every brand and size of vehicle, they are generally applied in these famous forklift brands:

Aisle Master	Columbia	Heli	Komatsu	Nissan	TCM
AutoGuide	Combilift	Hoist	Linde	Pack Mule	Toyota
Baoli	Crown	Hubtex	Manitou	Raymond	UniCarriers
Bendi/Landoll	Doosan (Daewoo)	Hyster	Mariotti	Rico	Utilev
Big Joe	Drexel	Hyundai	Mitsubishi	Schreck	White
Blue Giant	Elwell-Parker	Jungheinrich	Motrec	Steinbock	World
Caterpillar	Flexi	Kalmar	Multiton	Taylor-Dunn	Yale
Clark	HC Forklift				

Disclaimer: The information above is intended only to describe that products of ROYPOW are applicable to products of brands above under specific circumstances. It should not be regarded as any illegal use of third-party brands and trademarks. You should not infer that RoyPow has established or has any agency, employment, partnership or joint venture relationship with the companies above.

Which LiFePO₄ Battery
is Suitable for Your Forklifts

We make 6 different voltages to cover all classes of equipment.

One Stop
for All of
Your Battery
Needs!

For Class 1 Forklifts

36 V, 48 V, 72 V,
80 V, 90 V Battery Systems

For Counterbalance Forklifts



For Class 2 Forklifts

36 V Battery System

For Order Pickers, Reach Trucks



For Class 3 Forklifts

24 V Battery System

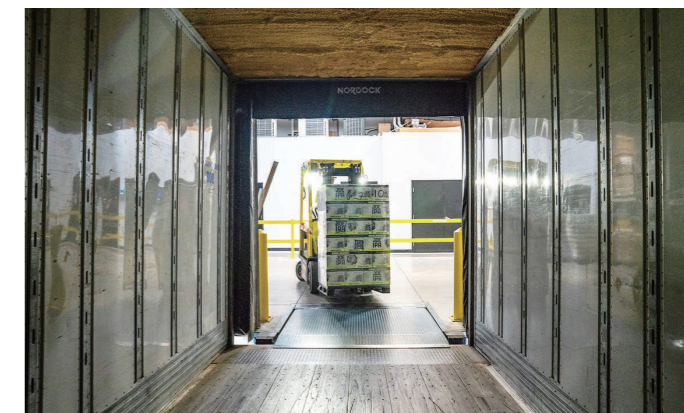
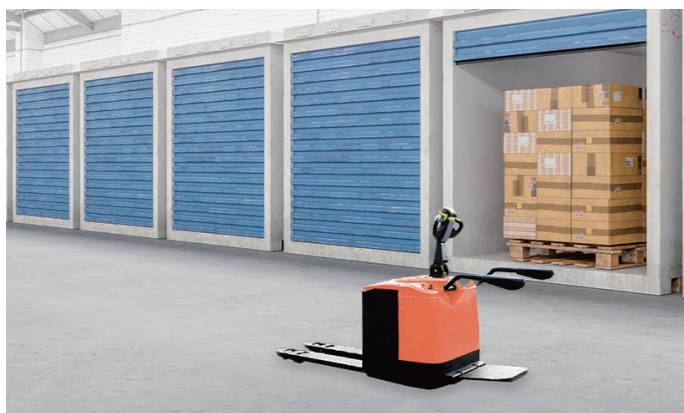
For Pallet Jacks, Stackers, Tugs



LiFePO₄ Batteries for Forklifts

Lithium drop-in replacements for lead-acid batteries.

- ✓ Retrofit your fleet to lithium-ion batteries and keep your equipment running all day long!
- ✓ Power your equipment up to 3 shifts a day!



An Ideal Lithium-ion Solution

Efficient

- ✓ High, consistent performance without the voltage drop at the end of the cycle.
- ✓ Reduce unplanned downtime with fast, efficient, opportunity charging.
- ✓ 10 years design life - a worthwhile upgrade.

Flexible and Worry-free

- ✓ Zero maintenance, no need for water top-ups or electrolyte checks.
- ✓ No battery swapping, reduce related accidents and resulting employee injuries.
- ✓ No need for specific charging room.

Green and Stable


- ✓ No acid spills, no noxious gas emissions.
- ✓ More thermal & chemical stability.
- ✓ Good for you and the planet.


Save Up to
70%
Expenses in 5 Years


Why ROYPOW LiFePO₄ Batteries


Retrofit Your Fleet to Lithium-ion Batteries.


 **5 Year Warranty**
5 year warranty brings you hassle-free experience.


 **Steady Output**
LiFePO₄ batteries keep a steady power output, which will not dramatically drop like lead-acid batteries.


 **Fire Safety**
Efficient and eco-friendly, the built-in hot aerosol fire extinguisher can quickly help with the fire fighting and reduce fire hazards for peace of mind.


 **Heating Function (Optional)**
The optional heating function can warm up the battery for optimal charging even at a low temperature of -20 C.

 **4G Module**
For product position tracking, battery health monitoring, and life cycle management.

 **3,500+ Cycle Life**
ROYPOW LiFePO₄ batteries last so long that they outperform traditional batteries.

 **SoC Meter**
Display the battery's state of charge, status and malfunctioning information in real time.

 **Anti-walking Function**
It can prevent your equipment from a sudden start or moving during charging.

 **Built-in Battery Management System (BMS)**
The smart and reliable BMS can ensure a better performance, and deliver longer battery run time and lifespan.

 **IP65 Protection**
Rated at IP65 protection grade, ROYPOW batteries are waterproof and dust-proof to maintain stable performance under all-weather working conditions.



IP67 ^{-40°C ~ -20°C} Anti-Freeze Lithium Battery for Forklifts

Power through the breeze.
Unstoppable energy for your forklift in the cold.



Waterproof
Cable Glands



- Less Capacity Loss
- Uncompromising Charging Efficiency
- Eco-friendliness



IP67 Ingress Protection

External waterproof cable glands with seal rings for superior water tightness



Anti-Condensation Design

Effective water absorption designs keep the inside battery box dry



Intelligent BMS

Designed for peak efficiency, intelligent management and safe protections



Lasts Longer

Have up to 10 years of lifespan.
Withstand up to 3,500 cycles



On-Board Thermal Insulation

Covered with quality thermal insulation design to avoid capacity loss



Pre-Heating Function

Warm the battery for optimal charging even at a low temperature



Opportunity Charging and Fast Charging

Can recharge in a short break to deal with multi-shift operations



Zero Maintenance

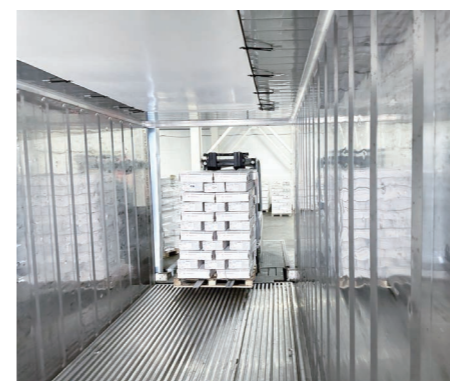
No need for water top-ups or electrolyte checks.
No frequent battery swaps.



Applications

Many products require constant refrigeration. Medicines, Food, Meat, Fruits, Vegetables, Dairy, and beverages require cold transportation as well as cold storage. For material handling in such cold storage warehouses,

ROYPOW cold storage lithium-ion battery solution is the best choice.



Cold Storage Battery System Specification:

Rated Voltages:
24 V, 36 V, 48 V, 72 V, 80 V, 96 V

Discharging temperature range:
-20°C to +55°C

Available battery system energy content:
2.56 kWh-116 kWh

Cold storage temperature range:
-40°C to +55°C

Charger Specification:

Rated Voltages:
24 V, 36 V, 48 V, 72 V, 80 V, 96 V

Working temperature range:
-20°C to +50°C

Input:
220V AC single phase or 400V AC three phase

Working humidity:
0%-95%RH

Available charging current:
50A to 400A

NOTE: Charger need to be placed outside cold storage warehouse.



Reliable Power for Most Aerial Lift Brands

ROYPOW lithium-ion batteries deliver consistent, reliable power for Aerial Lifts.



Advanced battery solution for most leading brands of aerial work platforms. They can be generally applied in these famous aerial work platform brands:

Zoomlion	Genie	Mantall	Noble
Xcmg	JLG	Runshare	Eastmanhm
Dingli	Sunward	Skyjack	Airman
LGMG	Sany	Manitou	Sivge
Sinoboom	Haulotte	Emis	More>
Snorkel/Xtreme	LiuGong		

Disclaimer: The information above is intended only to describe that products of ROYPOW are applicable to products of brands above under specific circumstances. It should not be regarded as any illegal use of third-party brands and trademarks. You should not infer that RoyPow has established or has any agency, employment, partnership or joint venture relationship with the companies above.

Which LiFePO₄ Battery is Suitable for Your Aerial Work Platforms?

One Stop for All of Your Battery Needs!

We make 24 and 48 volt systems to cover small and large platform Electric Scissor Lifts:

Small-platform

24 V Battery System

For small-platform electric scissor lifts



Large-platform

48 V Battery System

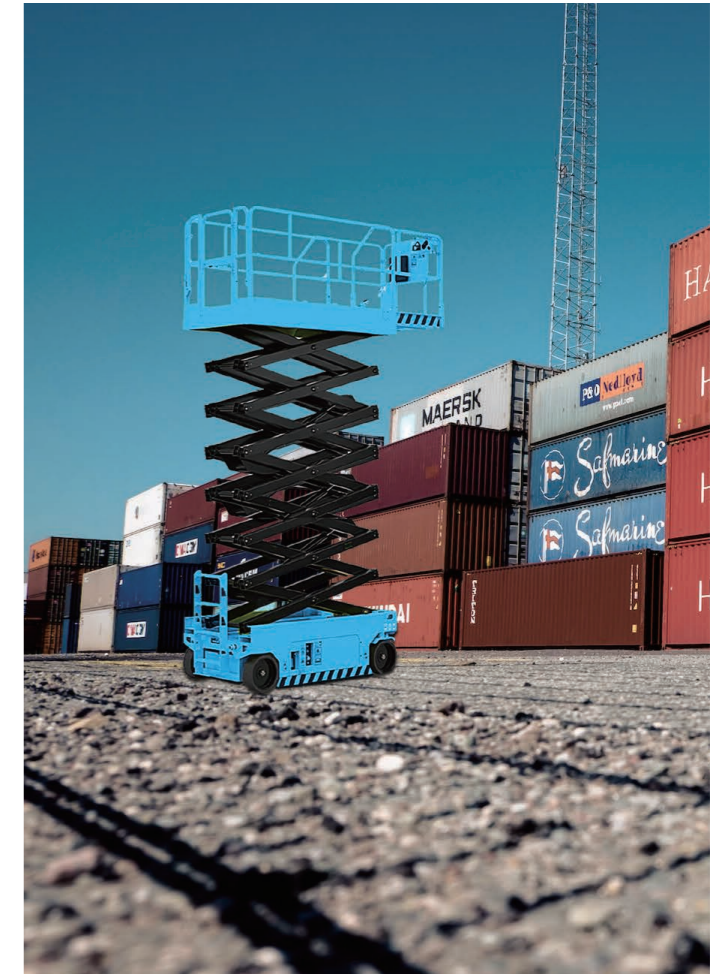
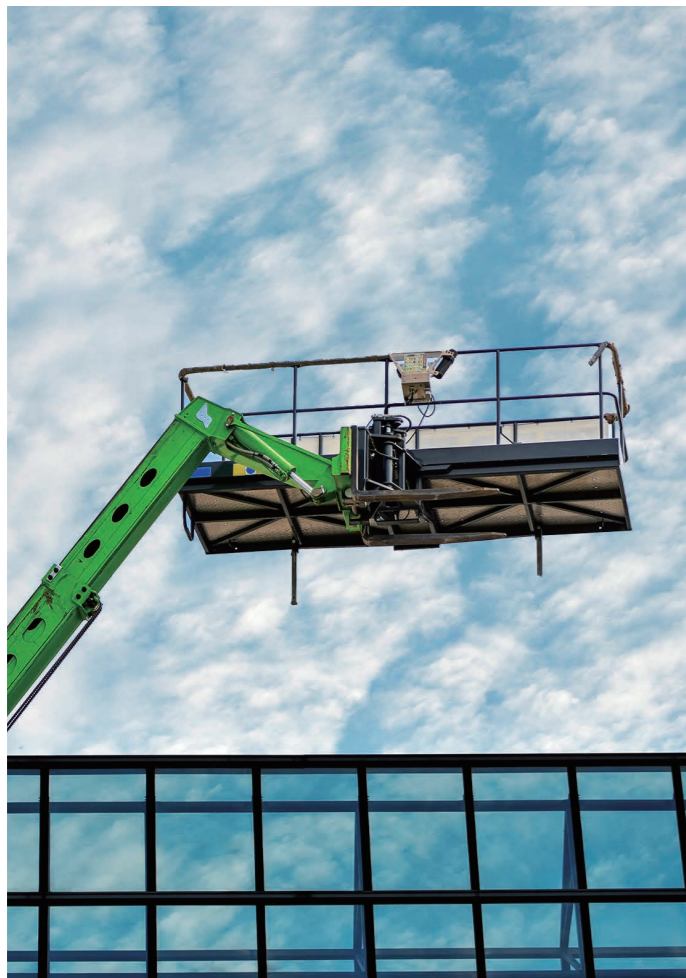
For large-platform electric scissor lifts



LiFePO₄ Batteries for Aerial Work Platforms

Switch to new technology, lithium drop-in replacements for lead-acid batteries.

- ✓ A full range of lithium-ion battery to power your aerial lifts.
- ✓ Maximum uptime and flexible lifting.



An Ideal Lithium-ion Solution

Efficient

- ✓ High, consistent performance without the voltage drop at the end of the cycle.
- ✓ Reduce unplanned downtime with fast, efficient, opportunity charging.
- ✓ 10 years design life - a worthwhile upgrade.

Flexible and Worry-free

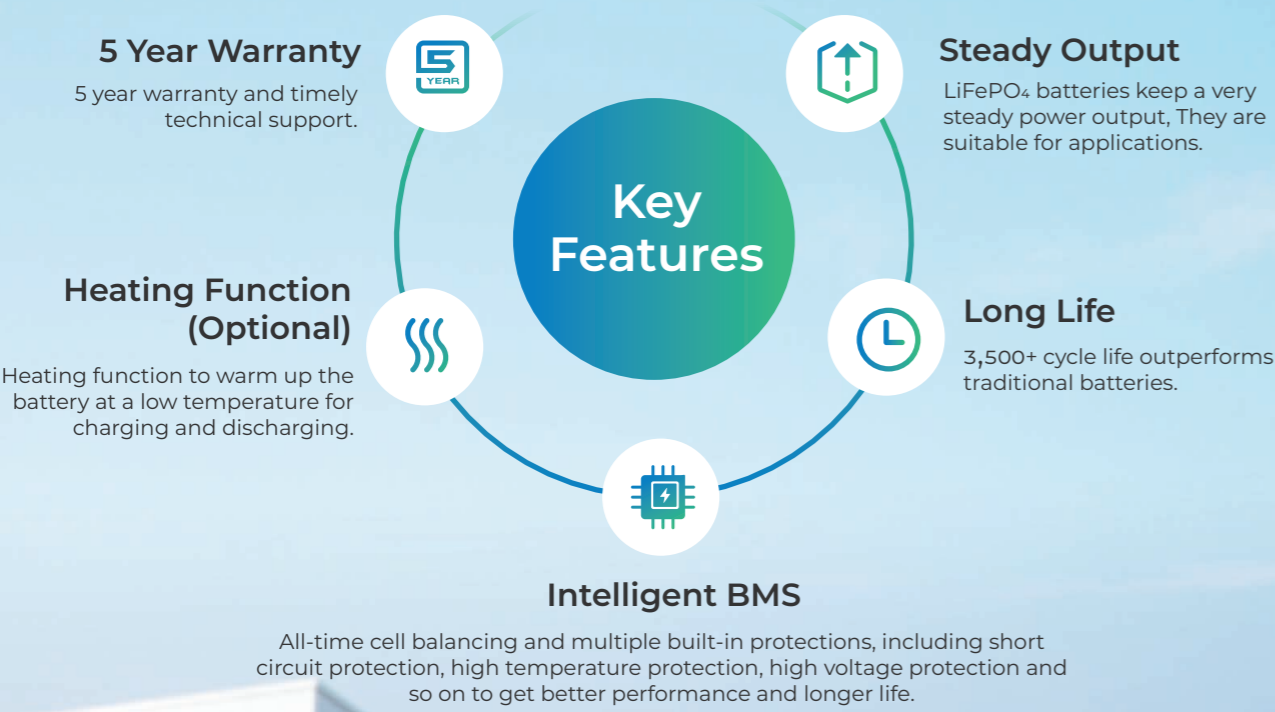
- ✓ Zero maintenance, no need for water top-ups or electrolyte checks.
- ✓ No battery swapping, reduce related accidents and resulting employee injuries.
- ✓ No need for specific charging room.

Green and Stable

- ✓ No acid spills, no noxious gas emissions.
- ✓ More thermal & chemical stability.
- ✓ Good for you and the planet.



Why ROYPOW LiFePO₄ Batteries



Specifications



Technical Specifications							Discharge Current		General	
Model	Nominal Voltage	Nominal Capacity	Stored Energy	Cycle Life	Dimensions (L*W*H)	Weight lbs. (kg)	Continuous Discharge	Maximum Discharge	Casing Material	IP Rating
24 V System										
T24100L	25.6 V	100 Ah	2.56 kWh	>3,500 times	13.8×9.8×10.3 inch (350×250×262 mm)	56 lbs. (25.6 kg)	150 A	250 A (30 S)	Steel	IP67
T24150L		150 Ah	3.84 kWh		20.3×10.1×10.3 inch (517*257*262 mm)	77 lbs. (35 kg)	150 A	350 A (30 S)	Steel	IP67
T24200L		200 Ah	5.12 kWh		19.2×13.4×10.5 inch (488*340*267 mm)	101 lbs. (46 kg)	150 A	350 A (30 S)	Steel	IP67
T24230L		230 Ah	5.89 kWh		16.53×14.33×10.51 inch (420×364×267 mm)	105.82 lbs. (48 kg)	200 A	350 A (30 S)	Steel	IP67
T24280L		280 Ah	7.17kWh		17.05×16.53×10.51 inch (433×420×267 mm)	121.25 lbs. (55 kg)	200 A	350 A (30 S)	Steel	IP67
48 V System										
T51230P	51.2V	230 Ah	11.78 kWh	>3,500 times	23.4×11.69×10.9 inch(A/B BOX) (597×297×277 mm A/B BOX)	220 lbs. (100 kg)	230 A	350 A (30 S)	Steel	IP67
T51280P		280 Ah	14.34 kWh		28.0×10.8×10.8 inch(A/B BOX) (712×275×275 mm A/B BOX)	243 lbs. (110 kg)	280 A	350 A (30 S)	Steel	IP67
Working Temperature Range			Charge -4°F~131°F (-20°C ~ 55°C)	Discharge -4°F~131°F (-20°C ~ 55°C)	Storage (1 month) -4°F~131°F (-20°C ~ 55°C)		Storage (1 year) 32°F~95°F (0°C~35°C)			

1. All pictures shown are for reference only and data are based on ROYPOW standard test procedures.
2. Actual performance may vary according to local conditions. Only authorized personnel are allowed to operate or make adjustments to the batteries.
3. We reserve the right to make revisions as well as product alterations and improvements at any time without prior notice.



Ideal Power for the Top Brands

ROYPOW lithium batteries are more reliable and will provide unmatched power for many floor cleaning machines.



Ideal battery solutions for most leading brands of floor cleaning machines. They can be generally applied in these famous floor cleaning machine brands:

Nilfisk/Advance	IPC	Viper	PowerBoss
Tennant	Comac	Clarke	Eureka
Nilfisk	FIMAP	ICE	Betco
Hako	Dulevo	NSS	More>
Kärcher	TVX	Minuteman	

Disclaimer: The information above is intended only to describe that products of ROYPOW are applicable to products of brands above under specific circumstances. It should not be regarded as any illegal use of third-party brands and trademarks. You should not infer that RoyPow has established or has any agency, employment, partnership or joint venture relationship with the companies above.

Which LiFePO₄ Battery is Suitable for Your Floor Cleaning Machines?

We make 24 and 36 volt systems to cover most Floor Cleaning Machines.

One Stop for All of Your Battery Needs!

24 V Battery System

For Walk Behind Sweepers & Scrubbers



36 V Battery System

For Ride-On Sweepers and Scrubbers



LiFePO₄ Batteries for Floor Cleaning Machines

Switch to new technology, lithium drop-in replacements for lead-acid batteries.

- ✓ Superior performance from these safe, durable batteries.
- ✓ Keep your machines always ready to go!



More Time Cleaning, Less Time Worrying

Flexible and Worry-free

- ✓ Much lighter than the traditional battery.
- ✓ No frequent battery swapping.
- ✓ No Memory Effect, opportunity charge anytime.

Stable and Sustained

- ✓ No acid spills, no noxious gas emissions.
- ✓ More thermal & chemical stability.
- ✓ High consistent performance without sudden power sag.

A Good Investment

- ✓ Zero maintenance, to save labor and maintenance costs.
- ✓ Reduce unplanned downtime with fast, efficient, opportunity charging.
- ✓ No battery swapping, reduce related accidents and resulting employee injuries.
- ✓ Up to 10 years design life reduces overall battery investment.

Save Up to
70%
Expenses in 5 Years

Why ROYPOW LiFePO₄ Batteries

5 Year Warranty

5 year warranty and timely technical support.

Steady Output

LiFePO₄ batteries keep a very steady power output. They are intended for applications.

Heating Function (Optional)

Heating function to warm up the battery at a low temperature for charging and discharging.

Long Life

3,500+ cycle life outperforms traditional batteries.

Key Features

Intelligent BMS

All-time cell balancing and multiple built-in protections, including short circuit protection, high temperature protection, high voltage protection and so on to get better performance and longer life.

31



Technical Specifications					Discharge Current			General		
Model	Nominal Voltage	Nominal Capacity	Stored Energy	Cycle Life	Dimensions (L*W*H)	Weight lbs. (kg)	Continuous Discharge	Maximum Discharge	Casing Material	IP Rating
24 V System										
S2460A	25.6 V	60 Ah	1.54 kWh	> 3,500 times	12.1x6.6x8.9 inch (307x168x226 mm)	33 lbs. (15 kg)	60 A	200 A (30 S)	ABS	IP65
S2460D		60 Ah	1.54 kWh		11.42x9.65x9.84 inch (290x245x250 mm)	46.30 lbs. (21 kg)	65 A	200 A (30 S)	Steel	IP67
S24100C		100 Ah	2.56 kWh		13.31x12.09x9.16 inch (338x307x232.7 mm)	63.49 lbs. (28.8 kg)	100 A	250 A (30 S)	Steel	IP67
S24150A		150 Ah	3.84 kWh		15.75x12.99x10.24 inch (440x330x260 mm)	85.5 lbs. (38.8 kg)	150 A	250 A (30 S)	Steel	IP67
W24200A		200 Ah	5.12 kWh		19.2x13.8x10.80 inch (488x350x274.3 mm)	101.41 lbs. (46 kg)	150 A	250 A (30 S)	Steel	IP67
W24230L		230 Ah	5.89 kWh		16.5x14.33x10.51 inch (420x364x267 mm)	101 lbs. (46 kg)	150 A	250 A (30 S)	Steel	IP67
W24280L		280 Ah	7.17kWh		17.05x16.53x10.51 inch (433x420x267 mm)	121.25 lbs. (55 kg)	150 A	250 A (30 S)	Steel	IP67
W24314L		314 Ah	8.04kWh		28.0x10.51x10.51 inch (433x420x267 mm)	127.87 lbs. (58 kg)	150 A	250 A (30 S)	Steel	IP67
36 V System										
S38100A	38.4 V	100 Ah	3.84 kWh	> 3,500 times	15.34 x 10.83 x 10.63 inch (389.6 x 275.1 x 270 mm)	94.80±4.41 lbs (43±2 kg)	150 A	250 A (30 S)	Steel	IP67
S38150A		150 Ah	5.76 kWh		20.47x16.14x8.91 inch (520x410x226.2 mm)	127.87 lbs. (58 kg)	150 A	250 A (30 S)	Steel	IP67
W38200A		200 Ah	7.68 kWh		22.60x19.68x12.51inch (574x500x317.9 mm)	136.68 lbs. (62 kg)	150 A	250 A (30 S)	Steel	IP67
S38230L		230 Ah	8.83 kWh		23.62x13.78x10.80 inch (600x350x274.3 mm)	142.86 lbs. (64.8 kg)	150 A	250 A (30 S)	Steel	IP67
W38280L		280 Ah	10.75 kWh		22.61x19.69x12.52 inch (574.3x500x317.9 mm)	217.34 lbs. (95 kg)	150 A	250 A (30 S)	Steel	IP67
W38314L		314 Ah	12.06 kWh		22.61x19.69x12.52 inch (574.3x500x317.9 mm)	209.44 lbs. (98.6 kg)	150 A	250 A (30 S)	Steel	IP67
Working Temperature Range			Charge -4°F~131°F (-20°C ~ 55°C)	Discharge -4°F~131°F (-20°C ~ 55°C)	Storage (1 month) -4°F~131°F (-20°C ~ 55°C)	Storage (1 year) 32°F~95°F (0°C~35°C)				

1. All pictures shown are for reference only and data are based on ROYPOW standard test procedures.

2. Actual performance may vary according to local conditions. Only authorized personnel are allowed to operate or make adjustments to the batteries.

3. We reserve the right to make revisions as well as product alterations and improvements at any time without prior notice.

More about ROYPOW Lithium-ion Batteries



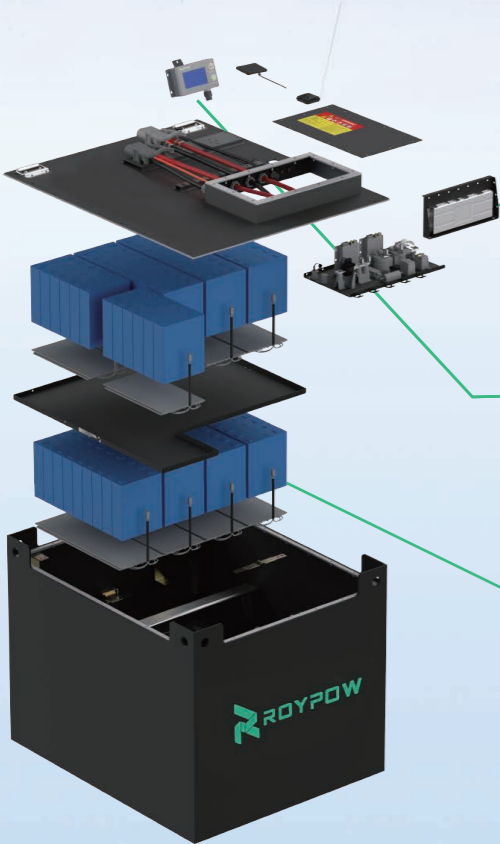
Quality and safety always come first. We also offer intelligent design from our professional R&D team.

Maintenance free

Fast charge

Long life

Ultra safe



Intelligent Design

- Built-in BMS**
 For cell balancing and advanced battery management.
- Control Panel Included**
 Showing all critical battery functions in real time, voltage, current, and remaining charging time and fault alarm.
- Battery Pack Module**
 Using LiFePO₄ cells to insure stable and safe battery performance.

Battery Management System (BMS)

The built-in BMS is equipped with automotive-grade components assuring safety, top quality and high energy density to provide a fully optimized solution for demanding industrial applications.

BMS software ensures the battery provides peak performance when in operation, delivers longer run time between charges, maximizes the total battery lifespan and to communicate well between the charger, battery and users.



The BMS can offer:

- All-time Cell Balancing and Battery Management.**
 Through the intelligent balancing strategy, balancing between individual cells can be realized. The BMS can keep the battery's consistency at all times when in operation, maximizing the battery efficiency and improving the battery's working life.
- Battery Real-time Monitoring and Communication Through CAN.**
 Monitoring cell voltage, electric current and battery temperature so that any movement outside the normal range disconnects the cell or the entire battery.
- Fault Alarm and Safety Protection.**
 When the battery is less than 10%, it will beep to prompt for charging in case of stopping somewhere far away from the charge station suddenly without notice. Over/under voltage, low/over temperature, over current or other faults will prompt to make the battery safe. Safety always comes first.

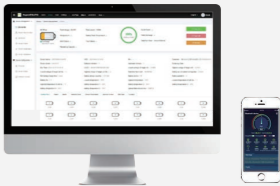
4G Module (for Forklift Batteries)



ROYPOW smart 4G module offers remote monitoring in real time, even in different countries. If faults occur, you can get an alarm. If the faults cannot be solved in person, you can get a remote diagnosis online from us to solve the problems as soon as possible.

With OTA (over the air) connectivity, remote software upgrades can solve software many problems in time and remote GPS can lock the forklift automatically if necessary.

Smart On-line Cloud Platform



It provides integrated battery system management information, including battery quantities, real-time data and status, positions and trajectories, alarm record, etc. One phone or one computer can monitor all the batteries, no matter where you are, very easy and convenient to manage.

Original Chargers for Forklift

ROYPOW professional charger enables optimal battery performance and the best communication between the charger and the battery.



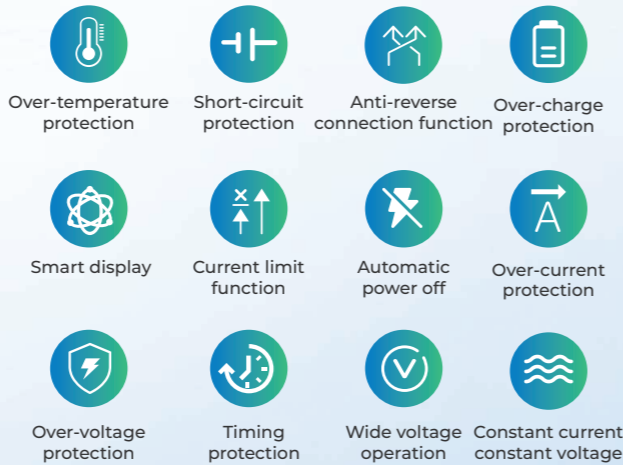
Intelligent Charging Management

To use the ROYPOW charger, the battery management system (BMS) can control the charging current according to different temperatures and SOC of the batteries.

ROYPOW's intelligent BMS ensures the safety of the battery and improves the charging efficiency.

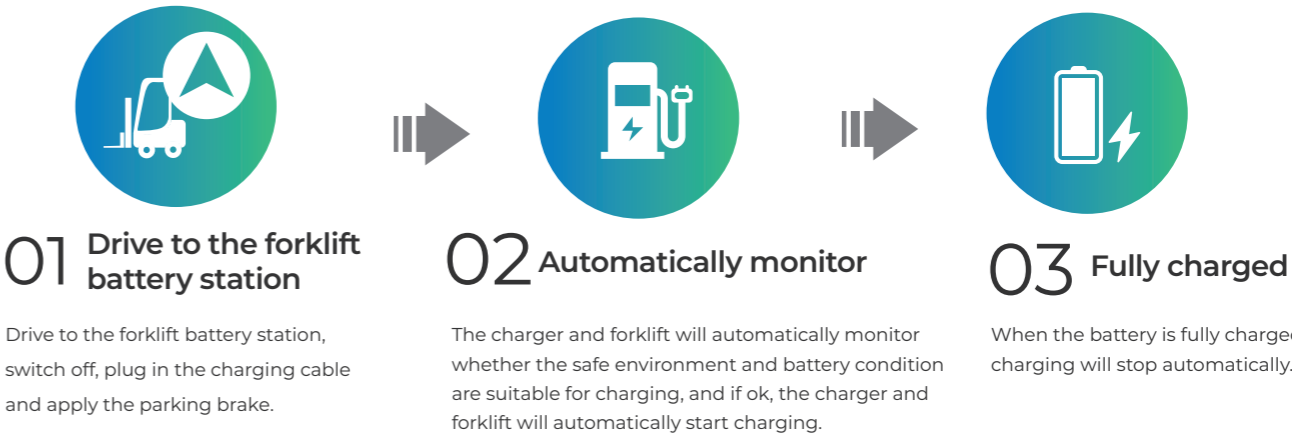
When the battery is at a low voltage, the battery can be charged at low current to ensure battery safety.

When the battery is less than 10%, it will beep to prompt for charging.



How to Charge? Easy and safe

i During the charging process, power to the lift is disconnected to prevent drive off.



Smart Display

Once the charger is connected, it will show the battery status, and the operator can leave the truck between shifts and have a rest.



Where do ROYPOW lithium-ion batteries charge? Flexible

- ✓ The batteries can be charged in the truck. No frequent battery swaps or battery storage room are required.
- ✓ The charging stations can be located anywhere in the facility that will promote proper charging by the operator. Eliminate charging room and related ventilation equipment.

TIPS

Compare to the charging location for lead-acid batteries:

Lead-acid batteries need extra batteries and battery storage room for swapping. And they also need a specific charging room with a ventilation system to avoid noxious gas when charging.

Original Charger for Aerial Work Platforms and Floor Cleaning Machines

ROYPOW has developed chargers specifically for each type of lithium batteries to deliver the optimal battery performance, safeguard the driving experience, and keep the best communication between our LiFePO4 batteries and the chargers.



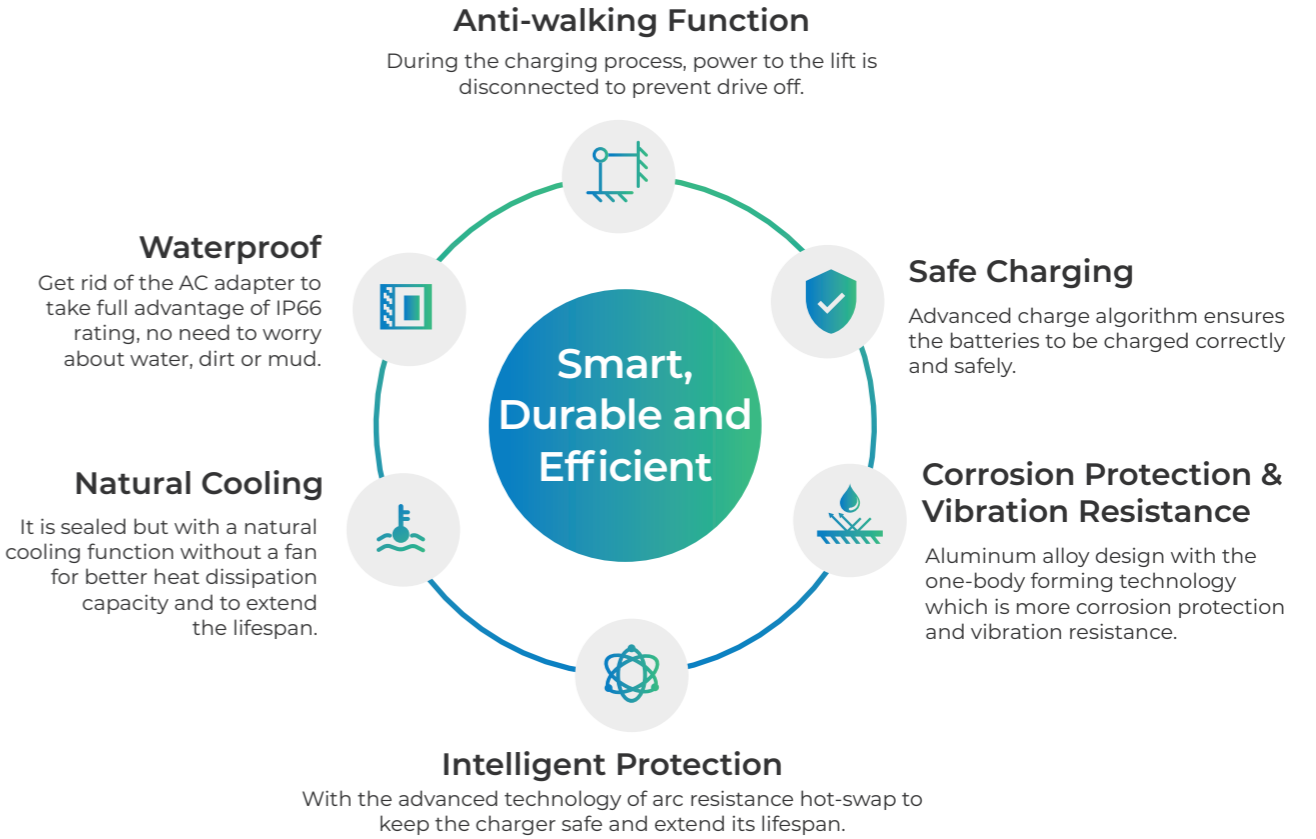
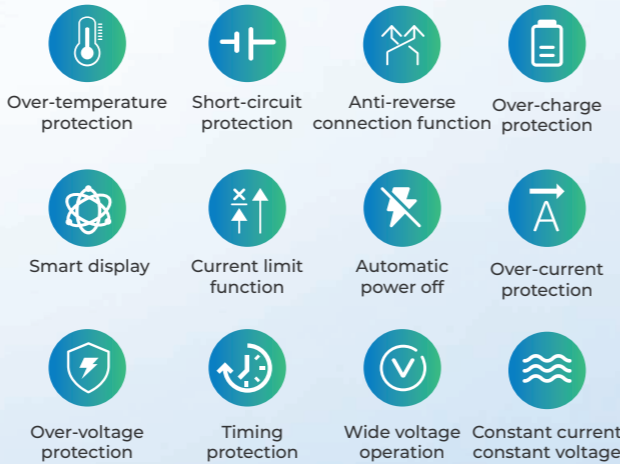
Intelligent Charging Management

To use the ROYPOW charger, the battery management system (BMS) can control the charging current according to different temperatures and SOC of the batteries.

ROYPOW's intelligent BMS ensures the safety of the battery and improves the charging efficiency.

When the battery is at a low voltage, the battery can be charged at low current to ensure battery safety.

When the battery is less than 10%, it will beep to prompt for charging.



Compatibility

Our chargers are compatible with the voltages in most countries and regions. And it's applied to cater to various charge modes and the multiple AC plugs for choices.

Single phase:
China 220V 50Hz America 120V 60Hz
Europe 230V 50Hz Japan 100V 50Hz/60Hz

AC input port
can be compatible with plugs from different countries.

DC output port
is configured as ROYPOW exclusive charging adaptor.

