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Version: January 03, 2025, LiFePO<sub>4</sub> Batteries for Golf Carts / LSVs / UTVs

# Lithium battery solutions

# LiFePO<sub>4</sub> Batteries for Golf Carts / LSVs / UTVs



The Global Leader in Lithium Golf Cart Batteries



# ROYPOW, Your Trusted Partner

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Chargers for Golf Carts / LSVs / UTVs



### **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** m<sup>2</sup> Headquarters Floor Area

**2,500** m<sup>2</sup> Testing Center

202 Patents

### **Quality Control Certificates:**

Environmental Management System:

#### ISO 14001:2015

Occupational Health and Safety Management System:

#### ISO45001:2018

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:

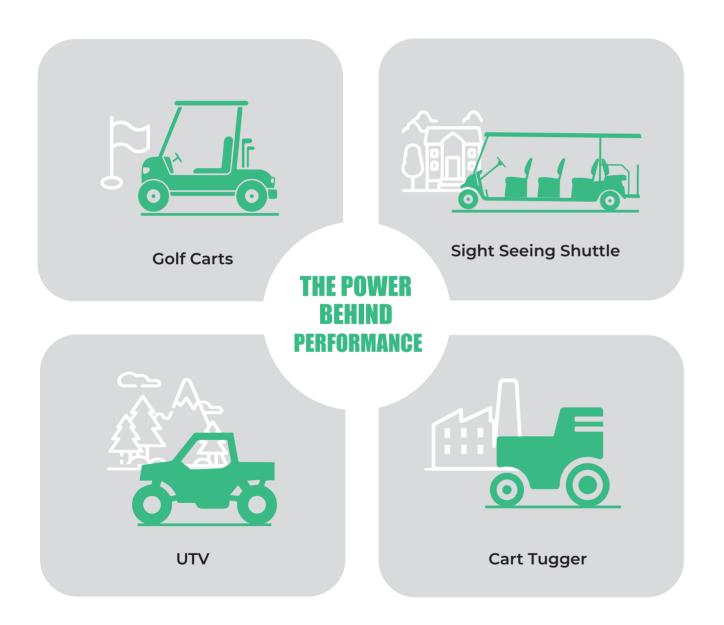
- > Low-speed Vehicle Batteries
- > Battery Systems for Off-highway Applications
- Residential Energy Storage Systems
- Mobile Energy Storage Systems

- > Industrial Batteries
- > Battery Systems for Emerging Applications
- Commercial & Industrial Energy Storage Systems
- Chargers



### **Meet the Ideal Power Solutions**

Whether counting on the vehicle for work, to play more rounds on the course, or to zip around your community, a reliable and high-quality battery is essential to power your ride and ensure a smooth uninterrupted experience.



### 100% Power. 100% Fun

ROYPOW lithium-powered batteries are the ideal choices to pair with the golf carts / LSVs / UTVs for top performance, consistently delivering sustained energy, marked by exceptional endurance and stability and ensuring you can always harness your golf cart potential to the fullest.



Last Longer



Go Further



More Fun



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### **Efficient and Powerful**

- High sustained power without the voltage drop at the end of the cycle  $\checkmark$
- As fast as 2.5 hours of charging time. No memory effect and charge any time 🗸
  - Light weight for easier maneuverability and faster start-up speed ✓





### **Zero Maintenance**

- ✓ No gas or acid spills, avoids the space, equipment and running costs of a battery room and ventilation system
- ✓ No need for frequent time-consuming battery swaps
- ✓ No maintenance saves labor and maintenance costs. Lower total costs of ownership

### Ultra-Safe

- Seamless enclosure and IP67 rated. No water or dust are getting in  $\checkmark$
- More thermal & chemical stability and reduced risk of thermal runaway 🗸
- Intelligent BMS for automatic cell balancing, advanced battery management, and multiple protections 🗸





### Long-Lasting. Long Runtime

- ✓ With up to 10 years design life and over 4,000 cycles
- ✓ Each unit is designed based on automotive-grade manufacturing standards
- ✓ Hold charge for 4 months



Give Extra Edges for Enjoyable Golfing **Note:** ROYPOW offers standard and customizable power solutions to meet your specific requirements and fit more leading golf cart / LSVs / UTVs.



### **Eco-Friendly**

Non-toxic and non-polluting. Good to you and the planet.

### **High Compatibility**

36 V, 48 V, and 72 V batteies for various golf cart models.



### 5 Years of Full Replacement Warranty\*

Extended warranty for greater peace of mind.

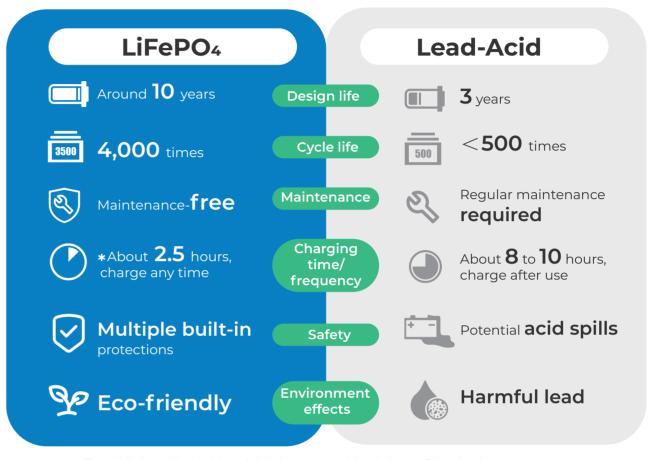
\* ROYPOW provides a full replacement service if the battery cannot be fixed.



# Give Extra Edges for Enjoyable Golfing

# LiFePO<sub>4</sub> Benefits **OVEľ** Lead-Acid Batteries

All the powerful benefits make the ROYPOW LiFePO4 battery an ideal replacement for traditional lead-acid batteries. 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).



 $* \ \mathsf{Specific models \ } \ \mathsf{charged \ } \ \mathsf{in \ } \ \mathsf{ROYPOW \ } \ \mathsf{original \ } \ \mathsf{chargers \ } \ \mathsf{can \ } \ \mathsf{achieve \ } 2.5 \ \mathsf{hours \ } \mathsf{of \ } \ \mathsf{charging \ } \mathsf{time.}$ 

Expenditures over <b>5</b> years	ROYPOW LiFePO <sub>4</sub> battery	Lead-			ROYPOW		
Battery cost	\$	\$	\$	\$	\$	\$	
Maintenance	/						
Electricity waste	/	0))))	0))))	0))))	0))))	0))))	
Installation	0)	0)))	0))	0))	0))	0)	
Shipping	9	0)	9	9	9	9	

# **L Series**

### Elevate your everyday ride with lithium-ion

Meet the ROYPOW L Series batteries that upgrade your golfing journey, providing the hassle-free experience they increasingly demand: longer lifespan, extended range, freedom from daily maintenance, and a guaranteed lifespan of 10 years.

Zero Maintenance

**Fast** Charge

Cycle Life

Warranty

Integrated **Double Fuses**  High Discharge Current



# S51100L + S38100L New



Industry's first lithium golf cart battery with CTP design

**Ingress Rating** 

Storage When Fully Charged

Design Life

Cycle Life

#### ✓ SoC Meter with Bluetooth Function

Monitor the battery SoC, voltage, and current through the

#### More Compact for Higher Compatibility

Cell-to-Pack (CTP) technology ensures more compact batteries to

#### High Current Output

Consistent high performance to support faster start-up speed



6-level Safety Protection



Flame retardant UL94 V-0 materials.



### Manufacturing Safety

Smart and strict control across the manufacturing process.



### Pack Safety

Integrated fuse and passed 18 reliability and safety tests.



Automotive-grade cells from the global top 3 brands.



#### **BMS Safety**

Self-developed intelligent BMS with multiple protections.



### Safety Certifications

Cells certified to 10+ industry standards such as IEC62619 and UL1642.

<sup>\*</sup>Specific models charged in ROYPOW original chargers can achieve 2.5 hours of charging time.

# **P** Series

### More power for demanding riding applications

ROYPOW P Series batteries enjoy all the benefits of lithium technologies while giving extra power tailored for load-carrying utility vehicles, multi-seaters, and rugged terrain transport.

Whether you're navigating the great outdoors for hunting or conquering steep hills, the P Series guarantees an extensive range and unparalleled safety, redefining your expectations.

**Zero**Maintenance

5 YRS

Warranty

Integrated

Double Fuses

**Fast** 

Charge

Over **3,500**Cycle Life

**High**Discharge Current

Expenses in 5 Years

<sup>\*</sup>Specific models charged in ROYPOW original chargers can achieve 5 hours of charging time.





### High Discharge Current

For navigating steep inclines or accelerating with a substantial payload, the battery consistently outperforms in the most challenging environments.



### Automatic Switch off

The automatic power-saving mode activates if the battery remains idle for over 8 hours, effectively reducing energy wastage.



### **Remote Switch**

Unlike standard batteries located beneath the seat, the battery offers the flexibility to position the switch on the dashboard or any preferred location for your utmost convenience.



### **Technical Specifications**



Model	Nominal Voltage	Nominal Capacity		Cycle Life	Continuous Charge / Discharge	Maximum Charge / Discharge Current	Mileage Per Full Charge	Dimensions (L*W*H)	Weight lbs. (kg)	IP Rating	
L Serie	es										
S38100L	38.4 V	100 Ah	3.84 kWh	>4,000 Times	20 A / 100 A	40 A / 300 A	30-40 miles (48-64 km)	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)	IP67	
S5165A	51.2 V	65 Ah	3.33 kWh	>4,000 Times	30 A / 130 A	55 A / 195 A	25-32 miles (40-51 km)	17.05 x 10.95 x 10.24 inch (433 x 278.5 x 260 mm)	88.18 lbs (≤40 kg)	IP67	
S5165L	51.2 V	65 Ah	3.33 kWh	>4,000 Times	30 A / 130 A	55 A / 195 A	25-32 miles (40-51 km)	18.11 x 10.94 x 10.24 inch (460 x 278 x 260 mm)	88.18 lbs (≤40 kg)	IP67	
S51100L	51.2 V	100 Ah	5.10 kWh	>4,000 Times	20 A / 130 A	40 A / 300 A	40-50 miles (64-80 km)	15.34 x 10.83 x 10.63 inch (389.6 x 275.1 x 270 mm)	110.23±4.41 lbs (50±2 kg)	IP67	
S51150L	51.2 V	150 Ah	7.68 kWh	>4,000 Times	30 A / 150 A	50 A / 350 A	60-70 miles (97-113 km)	31.50 x 12.60 x 8.58 inch (800 x 320 x 218 mm)	149.91 lbs (68 kg)	IP67	
S51200L-A	51.2 V	200 Ah	10.24 kWh	>4,000 Times	100 A / 200 A	120 A / 300 A	80-100 miles (128-160 km)	19.17 x 13.15 x 20.87 inch (488 x 334 x 530 mm)	198.42±11.02 lbs (91±5 kg)	IP67	
S51230L	51.2 V	230 Ah	11.776kwh	>4,000 Times	30 A / 230 A	100 A / 230 A	100~120 miles (160-190 km)	20.94 x 22.16 x 11.63 inch (532 x 563 x 295.5 mm)	209.43±22.05 lbs (95±10 kg)	IP67	
P Serie	es										
S51105P-N	51.2 V	100 Ah	5.12 kWh	>4,000 Times	30 A / 130 A	55 A / 315 A	40-50 miles (64-80 km)	22.17 x 12.99 x 9.98 inch (565 x 330 x 253.6 mm)	105.82±4.41 lbs (48±2 kg)	IP67	
S51150P-A	51.2 V	150 Ah	7.68 kWh	>4,000 Times	30 A / 180 A	40 A / 315 A	60-70 miles (97-113 km)	31.50 x 14.19 x 8.78 inch (800 x 360.4 x 223 mm)	145.51±6.61 lbs (66±3 kg)	IP67	
S72100P-B	76.8 V	100 Ah	7.68 kWh	>4,000 Times	20 A / 100 A	40 A / 300 A	60-70 miles (97-113 km)	31.50 x 12.97 x 10.08 inch (800 x 329.4 x 256 mm)	147.71±11.02 lbs (67±5 kg)	IP67	
S72150P-A	76.8 V	150 Ah	11.52kWh	>4,000 Times	30 A / 160 A	50 A / 315 A (30 S)	80-100 miles (130-180 km)	37.80 x 17.56 x 10.69 inch (960 x 446 x 271.5 mm)	220.46±22.05 lbs (100±10 kg)	IP67	
S72200P-A	76.8 V	200 Ah	15.36 kWh	>4,000 Times	30 A / 180 A	50 A / 315 A (30 S)	100-120 miles (150-200 km)	44.78 x 16.14 x 10.51 inch (1137.6 x 410 x 267 mm)	275.57±22 lbs (125±10 kg)	IP67	
Working Temperature Range		ge	Charge 32°F~131°F (0°C ~ 55°C)			charge ~131°F ( -20°C ~ 55°C		age (1 month ) 131°F ( -20°C ~ 55°C)	Storage (1 year) 32°F~95°F (0°C~35°C)		

Note: 1. Only authorized personnel are allowed to operate or make adjustments to the batteries.

2. All data are based on ROYPOW standard test procedures. Actual performance may vary according to local conditions.

# Original Charger for Golf Carts / LSVs / UTVs

### Charge Easier, Faster, and Safer.

ROYPOW LiFePO<sub>4</sub> batteries should be charged with the self-developed ROYPOW chargers to deliver a fast charging experience, keep the best communication between the batteries and chargers, and ensure optimal battery performance for extended battery life.



### Safe & Fast Charging

Charge safely. As little as 2.5 hours fast charging.



#### IP66 Rating

Protection against water, corrosion, dirt & mud.



### Intelligent Protection

Prevention against hot unplugging & plug-in, as well as arc discharge.



#### Zero Maintenance

Built with high reliability and requires virtually no maintenace.

### **Technical Specifications**



	DC Output						AC Input						Mechanical			
Model	Maximum DC output voltage			Nominal DC output current	Battery type	AC input voltage range	Nominal AC input voltage	Nominal AC input frequency	Maximum AC input current	Nominal AC input current	Power factor	Dimensions	Weight	Cooling		
RP4222-LFP	43.5 V	22 A	1,000 W	22 A @ 110 VAC, 22 A @ 220 VAC	Lithium	85-270 V	100-240 V	50-60 Hz	16 A	11 A	>0.9	11.1 x 6.57 x 4.5 inch (28.2 x 16.7 x 11.4 cm)	10.4 lbs (4.7 kg)	Active cooling with fan		
RP5813-LFP	58 V	13 A	900 W	13 A @ 110 VAC, 13 A @ 220 VAC	Lithium	85-270 V	100-240 V	50-60 Hz	16 A	11 A	>0.9	8.46 x 3.72 x 2.16 inch (28.2 x 12.4 x 7.2 cm)	7 lbs (3.2 kg)	Active cooling with fan		
RP5622-LFP	58 V	22 A	1,250 W	22 A @ 110 VAC, 22 A @ 220 VAC	Lithium	85-270 V	100-240 V	50-60 Hz	16 A	11 A	>0.9	11.1 x 6.57 x 4.5 inch (28.2 x 16.7 x 11.4 cm)	10.4 lbs (4.7 kg)	Active cooling with fan		
RP8714-LFP	87 V	14 A	1,900 W	14 A @ 110 VAC, 22 A @ 220 VAC	Lithium	85-270 V	100-240 V	50-60 Hz	16 A	11 A	>0.9	11.1 x 6.57 x 4.5 inch (28.2 x 16.7 x 11.4 cm)	10.4 lbs (4.7 kg)	Active cooling with fan		
CHG2430T	29.2 V	30 A	900 W	30A@110VAC 30A@220VAC	Lithium	85-270 V	120-240 V	45-65 Hz	9 A	9 A	≥0.99	98.4 x 53.5 x 45.7 inch 250 x 136 x 116 cm	8.8 lbs (4 KG)	Temperature controlled air cooling		
CHG3622T	43.2 V	22 A	1100 W	22A@110VAC 22A@220VAC	Lithium	85-270 V	120-240 V	45-65 Hz	9 A	9 A	≥0.99	104.9 x 65.7 x 34.1 inch 266.5 x 167 x 86.5 cm	11.02 lbs (5 KG)	Temperature controlled air cooling		
CHG4815T	58.4 V	15 A	900 W	15A@110VAC 15A@220VAC	Lithium	85-270 V	120-240 V	45-65 Hz	9 A	9 A	≥0.99	98.4 x 53.5 x 45.7 inch 250 x 136 x 116 cm	8.8 lbs (4 KG)	Temperature controlled air cooling		
CHG4820T	58 .4 V	20 A	1,100 W	20A@110VAC 20A@220VAC	Lithium	85-270 V	120-240 V	45-65 Hz	11 A	11 A	≥0.99	104.9 x 65.7 x 34.1 inch 266.5 x 167 x 86.5 cm	11.02 lbs (5 KG)	Temperature controlled air cooling		
CHG7215T	87.6 V	15 A	1100 W	15A@110VAC 15A@220VAC	Lithium	85-270 V	120-240 V	45-65 Hz	11 A	11 A	≥0.99	104.9 x 65.7 x 34.1 inch 266.5 x 167 x 86.5 cm	11.02 lbs (5 KG)	Temperature controlled air cooling		
Environmental IP rating: IP66 Humidity: 5% - 95% Operating temperature: -40°F - 185°F (-40°C - 85°C) Storage temperature: -40°F - 185°F (-40°C - 85°C)																

Note: 1. Only authorized personnel are allowed to operate or make adjustments to the batteries.

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<sup>2.</sup> All data are based on ROYPOW standard test procedures. Actual performance may vary according to local conditions.

# **Power Solutions for Various Applications**

When on the course, on campus, moving around a resort, or using it as a personal transport vehicle, ROYPOW lithium batteries power your needs.















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