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RoyPow®
Get powered. Get inspired

Your trusted
PARTNER

Lithium battery solutions

LiFePO4 BATTERY FOR GOLF CARTS

DROP-IN REPLACEMENTS
FOR LEAD-ACID BATTERIES



RoyPow®
Get powered. Get inspired



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technology leader in lithium battery R&D and manufacturing









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Why Choose A LiFePO4 Battery



BENEFITS OF LiFePO4 BATTERY

 LOW SELF-DISCHARGE Holds charge about 8 months	 ULTRA SAFE Multiple protection, thermal and chemical stability	 LONG LIFE Up to 3,500 life cycles	 LIGHT WEIGHT Up to 50% saving in space and 70% saving in weight
 FAST CHARGING Up to 2.5 hrs fast charging time	 ZERO MAINTENANCE No daily maintenance work and costs	 COST EFFECTIVE Up to 70% saving in expenditures	 EXTREME TEMP. PERFORMANCE Discharge rate up to 85% at -4°F(-20°C)

LiFePO4 Compared to Lead-acid

Five-year Cost Comparison

ROYPOW LiFePO4 BATTERY
(51V 105AH)

VS.

LEAD-ACID BATTERY
(48V 175AH)

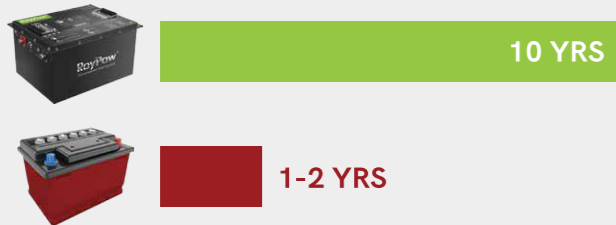


³Li
LiFePO4

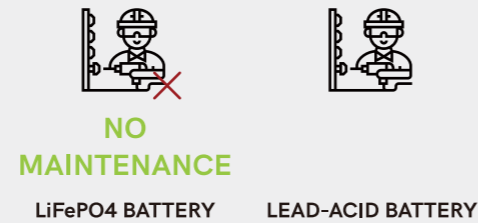


⁸²Pb
Lead

DESIGN LIFE



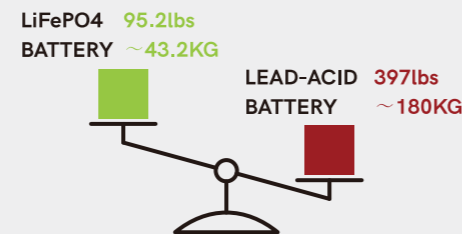
MAINTENANCE



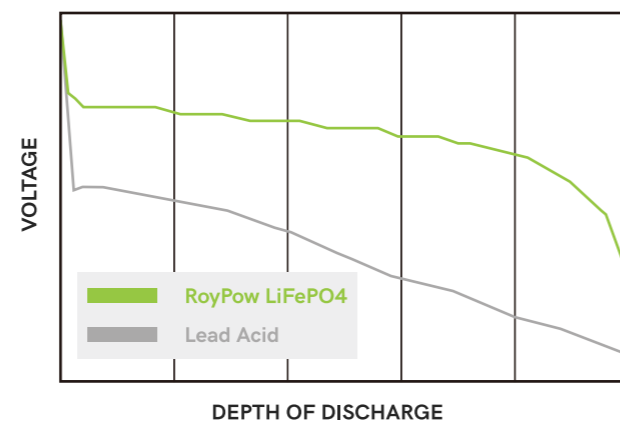
CHARGING TIME



BATTERY WEIGHT FOR GOLF CART



DISCHARGE VOLTAGE



	ROYPOW LiFePO4 BATTERY (51V 105AH)	LEAD-ACID BATTERY (48V 175AH)
CYCLE LIFE	> 3500 times	< 500 times
SAFETY	Multiple built-in protection	Gas inside may cause explosion
ECO FRIENDLY	No pollution	Lead is harmful
COST EFFECTIVE	More benefits, less man-hours costs	Less benefits, more man-hours costs
CHARGING FREQUENCY	No memory, charge any time	Charge everyday after using

5YRS WARRANTY 10YRS DESIGN LIFE



THE DESIGN LIFE OF THE GOLF CART BATTERY IS 10 YEARS AND WE WILL OFFER YOU A FIVE-YEAR WARRANTY.

RoyPow golf cart battery can save up to 70% expenditures for you in five years.

Below is the five-year expenditure contrast table between RoyPow lithium battery and lead-acid battery.

PURCHASES OVER FIVE YEARS LiFePO4 BATTERY ROYPOW (51V 105AH) LEAD-ACID BATTERY (48V 175AH)

	LiFePO4 BATTERY ROYPOW (51V 105AH)	LEAD-ACID BATTERY (48V 175AH)
BATTERY COST	1 money bag icon	5 money bag icons
MAINTENANCE	1 slash icon	5 stack of coins icons
ELECTRICITY WASTE	1 slash icon	5 stack of coins icons
INSTALLATION	1 stack of coins icon	5 stack of coins icons
SHIPPING	1 coin icon	5 coin icons

S SERIES

The Right Choice for Your Golf Cart Fleet

ZERO
MAINTENANCE

UP TO
10YRS
BATTERY LIFE

5YRS
WARRANTY

UP TO
70MI.
MILEAGE



Our LiFePO4 batteries are designed to replace the lead-acid batteries. They can deliver the sort of hassle-free experience customers increasingly demand – batteries that are longer lasting, longer range, free from daily maintenance and have a designed life-span of 10 years. They also offer high charging efficiency and less power consumption.

Affordable, Durable, Reliable



SAVE MONEY AND STAFF TIME

You don't need to pay man-hours costs of regular water filling, maintenance, checks, and expensive recycling costs. No battery acid stains on driveway pavers or garage floor.



MORE RUNTIME, MORE MILEAGE

Top class performance delivers battery with no memory, you can charge any time, and with a full charge time, you can run longer and up to 70 miles mileage.



FAST CHARGING AND STABLE OPERATION

More thermal and chemical stability and multiple built-in protection functions make this battery reliable and stable with enjoying faster charging time.

UP TO
8.2
KWH

2.5HRS
FAST CHARGING

UP TO
315
AMP

OVER
3500
LIFE CYCLES

The "S series" covers the most popular golf cart brands and models. If this doesn't fit your requirements, with our wide product range, advanced technology and continuous R&D, we will be happy to discuss alternative solutions or bespoke engineered options.

MODEL	TECHNICAL SPECIFICATION						CHARGE CURRENT	DISCHARGE CURRENT	
	NOMINAL VOLTAGE	NOMINAL CAPACITY	STORED ENERGY (Wh/kg)	DIMENSION (L*W*H)cm	WEIGHT lbs.(kg)	TYPICAL MILEAGE PER FULL CHARGE	STANDARD CHARGE	STANDARD DISCHARGE	MAXIMUM DISCHARGE
36V									
S3856	38V	56Ah	1.92kWh	38.5*33.8*24.5	59 (27)	Up to 15-20 miles	22A	50A	200A (10S)
S38105	38V	105Ah	4.03kWh	38.5*33.8*24.5	75 (34)	Up to 30-40 miles	22A	100A	200A (10S)
48V									
S5156	51V	56Ah	2.6kWh	46*33.4*23.2	77 (35)	Up to 20-30 miles	22A	50A	200A (10S)
S51105	51V	105Ah	5.3kWh	46*33.4*23.2	96 (43.6)	Up to 40-50 miles	22A	100A	200A (10S)
S51105P	51V	105Ah	5.3kWh	58.5*33*25	103 (46.8)	Up to 40-50 miles	22A	105A	315A (30S)
S51160	51V	160Ah	8.2kWh	80*36*22.1	159 (72)	Up to 60-70 miles	22A	100A	200A (10S)
S51160P	51V	160Ah	8.2kWh	80*32*23.2	165 (75)	Up to 60-70 miles	22A	160A	315A (30S)
72V									
S72105P	72V	105Ah	8.06kWh	74*32*24.6	159 (72)	Up to 60-70 miles	14A	105A	315A (30S)

CHARGING TIME		GENERAL						ENVIRONMENT TEMP. RANGE			
QUICK CHARGE	STANDARD CHARGE	LIFE CYCLES	SELF DISCHARGE PER MONTH	CELL COMBINATION	CELL ASSEMBLY	CASING MATERIAL	IP RATING	CHARGE	DISCHARGE	STORAGE (1 MONTH)	STORAGE (1 YEAR)
2.0h	2.5h	> 3500 times	Max 3%	12S1P	LF50K (3.2V 50Ah)	Metal	IP67	32°F~131°F (0°C ~ 55°C)	-4°F~131°F (-20°C ~ 55°C)	-4°F~113°F (-20°C ~ 45°C)	-32°F~95°F (0°C ~ 35°C)
2.0h	5.0h	> 3500 times	Max 3%	12S1P	LF105 (3.2V 50Ah)	Metal	IP67	32°F~131°F (0°C ~ 55°C)	-4°F~131°F (-20°C ~ 55°C)	-4°F~113°F (-20°C ~ 45°C)	-32°F~95°F (0°C ~ 35°C)
2.0h	2.5h	> 3500 times	Max 3%	16S1P	LF50K (3.2V 50Ah)	Metal	IP67	32°F~131°F (0°C ~ 55°C)	-4°F~131°F (-20°C ~ 55°C)	-4°F~113°F (-20°C ~ 45°C)	-32°F~95°F (0°C ~ 35°C)
2.5h	5.0h	> 3500 times	Max 3%	16S1P	LF105 (3.2V 105Ah)	Metal	IP67	32°F~131°F (0°C ~ 55°C)	-4°F~131°F (-20°C ~ 55°C)	-4°F~113°F (-20°C ~ 45°C)	-32°F~95°F (0°C ~ 35°C)
2.0h	5.0h	> 3500 times	Max 3%	16S1P	LF105 (3.2V 105Ah)	Metal	IP67	32°F~131°F (0°C ~ 55°C)	-4°F~131°F (-20°C ~ 55°C)	-4°F~113°F (-20°C ~ 45°C)	-32°F~95°F (0°C ~ 35°C)
3.0h	8.0h	> 3500 times	Max 3%	16S2P	LF80A (3.2V 82Ah)	Metal	IP67	32°F~131°F (0°C ~ 55°C)	-4°F~131°F (-20°C ~ 55°C)	-4°F~113°F (-20°C ~ 45°C)	-32°F~95°F (0°C ~ 35°C)
3.0h	8.0h	> 3500 times	Max 3%	16S2P	LF80A (3.2V 82Ah)	Metal	IP67	32°F~131°F (0°C ~ 55°C)	-4°F~131°F (-20°C ~ 55°C)	-4°F~113°F (-20°C ~ 45°C)	-32°F~95°F (0°C ~ 35°C)
2.5h	8.0h	> 3500 times	Max 3%	24S1P	LF105 (3.2V 105Ah)	Metal	IP67	32°F~131°F (0°C ~ 55°C)	-4°F~131°F (-20°C ~ 55°C)	-4°F~113°F (-20°C ~ 45°C)	-32°F~95°F (0°C ~ 35°C)

Note: 1. Only authorized personnel are allowed to operate or make adjustments to the batteries.
2. Data are based on RoyPow standard test procedures. Actual performance may vary according to local conditions.

Battery Replacement Steps

HOW TO REPLACE YOUR LEAD-ACID BATTERIES WITH RoyPow BATTERIES

01

Open the golf cart compartment, you will see the original lead-acid batteries.

02

Disconnect all the wires safely, and pull the batteries out.

03

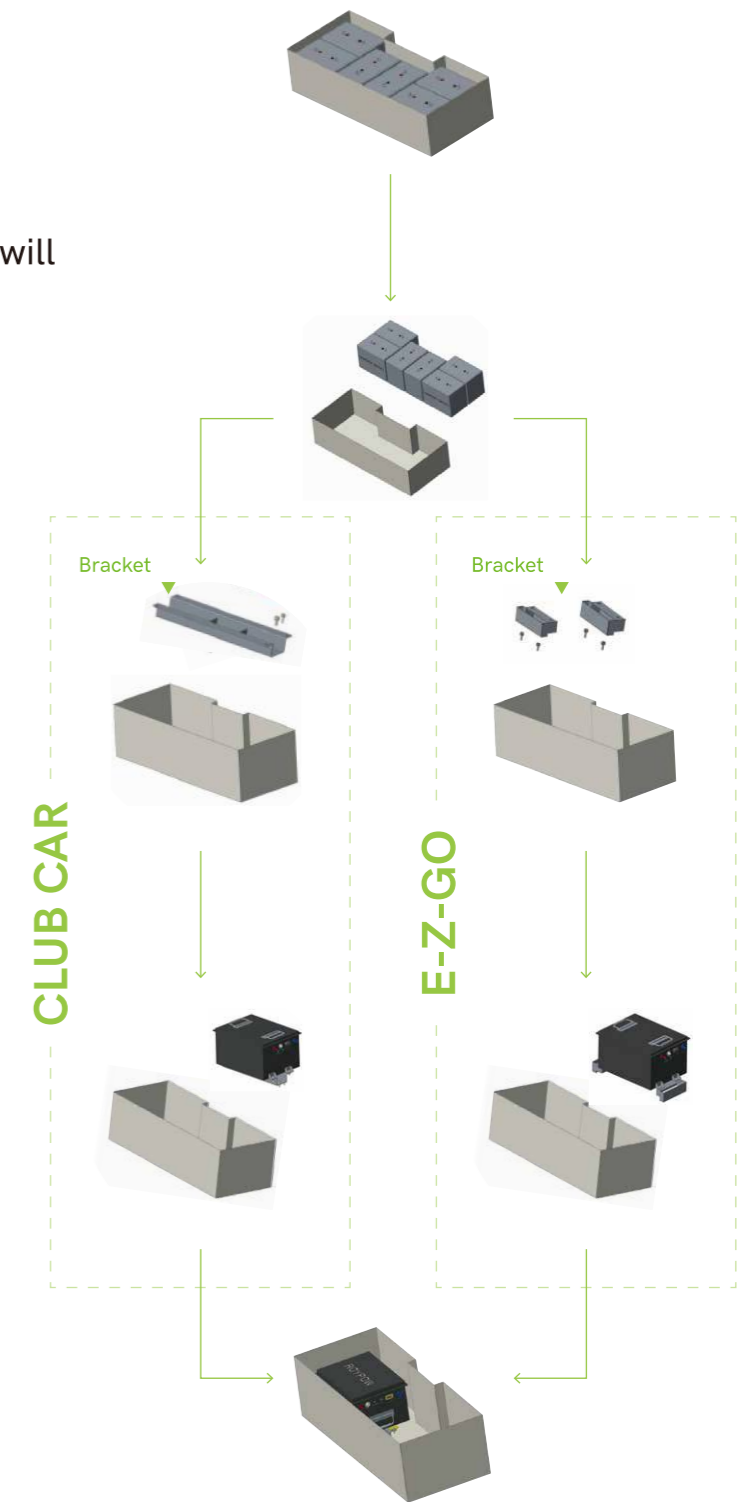
Fasten the bracket on the tray as the base.

04

Put RowPow LiFePO4 battery pack inside and fasten the pack to the bracket base.

05

Connect the wires safely, then you are ready to go.



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



LiFePO4 GOLF TROLLEY BATTERY



Product Specification

LiFePO4 BATTERY PACK	12.8V24Ah
NOMINAL CAPACITY (AT 0.2C DISCHARGE RATE)	24±1Ah
STORED ENERGY	307.2Wh
DISCHARGE NORMAL CURRENT	≤15A
DISCHARGE MAX CONTINUOUS CURRENT	≤30A (≤5min)
DISCHARGE INNER RESISTANCE	≤40mΩ
CELL COMBINATION	4S4P
CASING MATERIAL	ABS
WEIGHT	6.5lbs (2.95 kg)
DIMENSION (L*W*H, ±1, CM)	17 * 15.7*10.2
CHARGE CURRENT	≤6A
CHARGING INPUT	Lotus plug
DISCHARGE OUTPUT	"T-Anderson connectors (Length: 33±10 cm)"
NOMINAL VOLTAGE	12.8V
LIFE CYCLES	>2000 times
DISCHARGE CUT-OFF VOLTAGE	About 10V
CHARGE VOLTAGE	14.6±0.1V
CHARGE MODE	CC/CV, please use special lithium charger
CHARGE TEMPERATURE RANGE	32°F~113°F (0°C~45°C)
DISCHARGE TEMPERATURE RANGE	-4°F~140°F (-20°C~60°C)
STORAGE TEMPERATURE RANGE (LONG-TERM)	59°F~77°F (15°C~25°C)
HUMIDITY	RH≤85%

Note: 1. Only authorized personnel are allowed to operate or make adjustments to the batteries.
2. Data are based on RoyPow standard test procedures. Actual performance may vary according to local conditions.

Accessory - Charger

IT IS DESIGNED FOR OUR LiFePO4 GOLF CART BATTERY



HIGH EFFICIENCY

Fast charging reaches up to 30A output current, high-efficiency performance for electricity savings and shorter charge times. Active cooling enables optimal peak performance.

GLOBAL USED

Capable of operating reliably on any single-phase grid worldwide.

HIGH RELIABILITY

Manufactured in a world-class facility specializing in high-reliability solutions. Rugged, IP66 sealed aluminum die-cast enclosure protects against vibration, shock, dirt, fluids and chemicals.

INTELLIGENT

Compact, light, automatic trickle charge function. Automatically charges batteries and keeps them at full charge even when you're away from your home/work so they never die and can give your batteries longer overall life.

Product Specification

DC OUTPUT	MAXIMUM DC OUTPUT VOLTAGE	58.2V
	MAXIMUM DC OUTPUT CURRENT	22.0A
	MAXIMUM DC OUTPUT POWER	1704W
	NOMINAL DC OUTPUT CURRENT	"30A @ 220VAC 22A @ 110VAC"
AC INPUT	BATTERY TYPE	Lithium
	AC INPUT VOLTAGE RANGE	85-270VAC
	NOMINAL AC INPUT VOLTAGE	100-240VAC
	NOMINAL AC INPUT FREQUENCY	50 / 60Hz
	MAXIMUM AC INPUT CURRENT	11A
	NOMINAL AC INPUT CURRENT	10A
	POWER FACTOR	>0.9
MECHANICAL	DIMENSIONS	28.2 x 16.7 x 11.4cm (11.1 x 6.57 x 4.5")
	WEIGHT	10.4 lbs (4.7kg)
	COOLING	Active cooling with fan
ENVIRONMENTAL	ENCLOSURE	IP66
	HUMIDITY	5% – 95%
	OPERATING TEMPERATURE	"-40°F to 149°F (-40 C to +65 C) Derated at >104°F (40 C)"
	STORAGE TEMPERATURE	-40°F to 185°F (-40 C to +85 C)

Note: Data are based on RoyPow standard test procedures. Actual performance may vary according to local conditions.

About Us



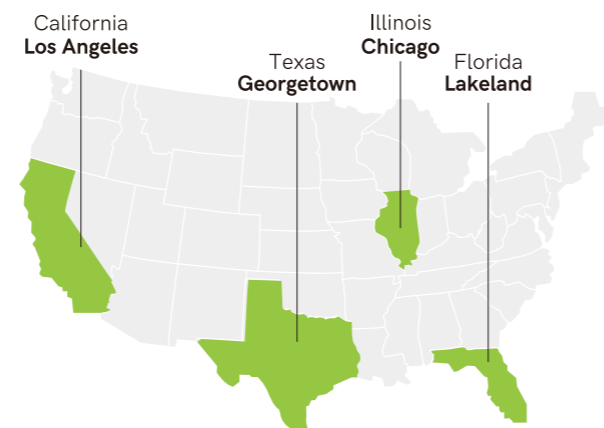
ROYPOW TECHNOLOGY CO., LTD IS A SUBSIDIARY OF EVE ENERGY WHO IS A TECHNOLOGY LEADER IN LITHIUM BATTERY R&D AND MANUFACTURING. IT HAS BEEN A STRONG AND INNOVATION-DRIVEN LITHIUM BATTERY COMPANY SINCE ITS FOUNDING IN 2001.

- ▶ **ROYPOW'S PURPOSE** is to provide reliable and clean lithium power and energy storage solutions with cutting edge products covering customers' lives from home, travel, and industrial equipment to leisure equipment and golf carts.
- ▶ **WITH 20 YEARS' EXPERIENCE** in battery technology, RoyPow is proud to offer customers

professional battery system solutions for **low speed vehicles (LSVs)** including golf carts, **automated guided vehicle (AGVs)**, **industrial applications** including forklifts and materials handling equipment, **aerial work platforms and floor cleaning machines**, **energy storage** including portable & mobile appliances, residential power storage and solar systems.

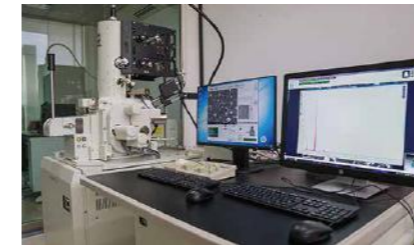
TIMELY PROFESSIONAL SUPPORT AND SERVICE ARE ALSO AVAILABLE THROUGHOUT THE WORLD. WITH OFFICES AND PARTNERS IN MANY COUNTRIES, WE WANT YOU TO KNOW THAT WHEREVER A CUSTOMER MAY BE, WE CAN DELIVER EXPERTISE, GUIDANCE AND SERVICE WITHOUT DELAY.

- ▶ In the USA, we have offices in **Texas, Florida, Illinois, and California**. Each office has a local sales and service team and a warehouse.



Company Strength

RoyPow is always striving to push boundaries with innovation and technology.



R&D ability



R&D test centers



Manufacture ability



6

FACTORIES



40

PHD'S



800

R&D ENGINEERS



1,370

PATENTS



8,000

STAFF



50,000m²

ADVANCED R&D CENTER



1,000,000m²

FACTORY AREA



FULLY

AUTOMATION PRODUCTION

"USING THE MOST ADVANCED AUTOMATED PRODUCTION FACILITIES, ROYPOW PRODUCES HIGH QUALITY POWER CELLS AND BATTERY PACK SYSTEMS FOR YOU."

Factories



Zhongkai HQ Zone A



Zhongkai HQ Zone B



Jinquan Industrial Park Zone 1



Jinquan Industrial Park Zone 2