



Lithium battery solutions

## LiFePO4 BATTERY FOR GOLF CARTS





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#### **Why Choose A LiFePO4 Battery**







#### **BENEFITS OF LiFePO4 BATTERY**



#### LOW SELF-DISCHARGE

Holds charge over 8 months

Multiple protection, thermal and chemical stability

**ULTRA SAFE** 



#### **FAST CHARGING**

Up to 2 hours fast charging time

#### ZERO MAINTENANCE

No daily maintenance work and costs



#### LONG LIFE

Up to 3,500 Up to 50% saving in space and 70% saving in weight life cycles



#### COST **EFFECTIVE**

in expenditures



**LIGHT WEIGHT** 

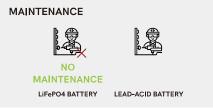
#### EXTREME TEMP. **PERFORMANCE**

Up to 70% saving Discharge rate up to 85% at -4°F (-20°C)

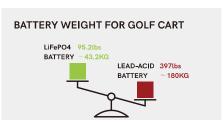
#### **LiFePO4 Compared to Lead-acid**

# ROYPOW LIFePO4 BATTERY (51V 105AH) VS. LEAD-ACID BATTERY (48V 175AH) BY Ph Lead

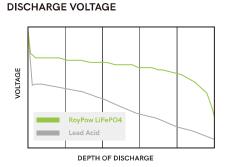








	ROYPOW LiFePO4 BATTERY (51V 105AH)	LEAD-ACID BATTERY (48V 175AH)
CYCLE LIFE		< 500 times
SAFETY	Multiple built-in protection	Gas inside may cause explosion
ECO FRIENDLY	No pollution	Lead is harmful
COST EFFECTIVE		Less benefits, more man-hours costs
CHARGING FREQUENCY	No memory, charge any time	Charge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



#### **Five-year Cost Comparison**



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-/ (48V 17	ACID BATTE 75AH)	≣RY		
BATTERY COST	\$	\$	\$	\$	\$	\$
MAINTENANCE	/					
ELECTRICITY WASTE	/	0)))	0))))	0))))	0))))	0)))
INSTALLATION	98	<u>9</u>	0 0 0	0))) 0))	9) 9)	e§
SHIPPING	9	0	9	9	0	0)

04 05

## **S SERIES**

The Right Choice for Your Golf Cart Fleet

**ZERO MAINTENANCE** 

UP TO **10YRS** 

UP TO 70MI.



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.



	Technical Specification					
Model	Nominal Voltage	Nominal Capacity	Stored Energy	Dimension (L×W×H)	Weight Ibs. (kg)	Typical Mileage Per Full Charge
36V System						
S38105	36V (38,4V)	105 Ah	4.03 kWh	15.2×13.3×9.6 inch (385×338×245 mm)	75 lbs. (34 kg)	48-64 km (30-40 miles)
48V System						
S5156	48V (51.2V)	56 Ah	2.86 kWh	18.1×13.2×9.7 inch (460×334×247 mm)	73 lbs. (33 kg)	35-48 km (20-30 miles)
S51105	48V (51.2V)	105 Ah	5.37 kWh	18.1×13.2×9.7 inch (460×334×247 mm)	95 lbs. (43.2 kg)	64-81 km (40-50 miles)
S51105P	48V (51.2V)	105 Ah	5.37 kWh	22.2×13.0×10.0 inch (565×330×255 mm)	103 lbs. (46.8 kg)	64-81 km (40-50 miles)
S51160	48V (51,2V)	160 Ah	8.19 kWh	31.5×14.2×9.13 inch (800×360×232 mm)	159 lbs. (72 kg)	97-113 km (60-70 miles)
S51160P	48V (51.2V)	160 Ah	8.19 kWh	31.5×12.6×9.13 inch (800×320×232 mm)	165 lbs. (75 kg)	97-113 km (60-70 miles)
72V System						
S72105P	72V (76.8 V)	105 Ah	8.06 kWh	29.1×12.6×9.7 inch (740×320×246 mm)	159 lbs. (72 kg)	97-113 km (60-70 miles)

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.

#### Affordable, Durable, Reliable



#### **SAVE MONEY AND** STAFF TIME

You don't need to pay man-hours costs of regular water filling, maintenance, and ch-

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

UP TO

**2.0HRS FAST CHARGING** 

**OVER** 3,500

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.

Discharg	e Current	Environment Temp. Range			Genera <b>l</b>		
Continuous	Maximum	Charge	Discharge	Discharge Storage		Casing	IP
Discharge	Discharge			( 1 month )	(1 year)	Material	Rating
				,			
100 A	200 A (10 s)	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)	Steel	IP67
				,			
50 A	200 A (10 s)	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)	Steel	IP67
100 A	200 A (10 s)	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)	Steel	IP67
150 A	315 A (30 s)	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)	Steel	IP67
100 A	200 A (10 s)	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)	Steel	IP67
160 A	315 A (30 s)	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)	Steel	IP67
150 A	315 A (30 s)	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)	Steel	IP67



#### **Battery Replacement Steps**

#### 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

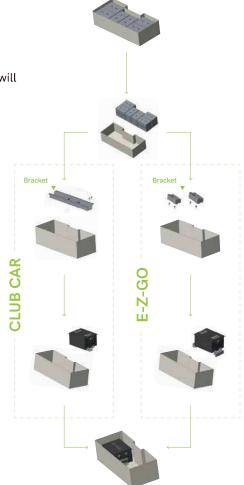
Fasten the bracket on the tray as the base.

#### 04

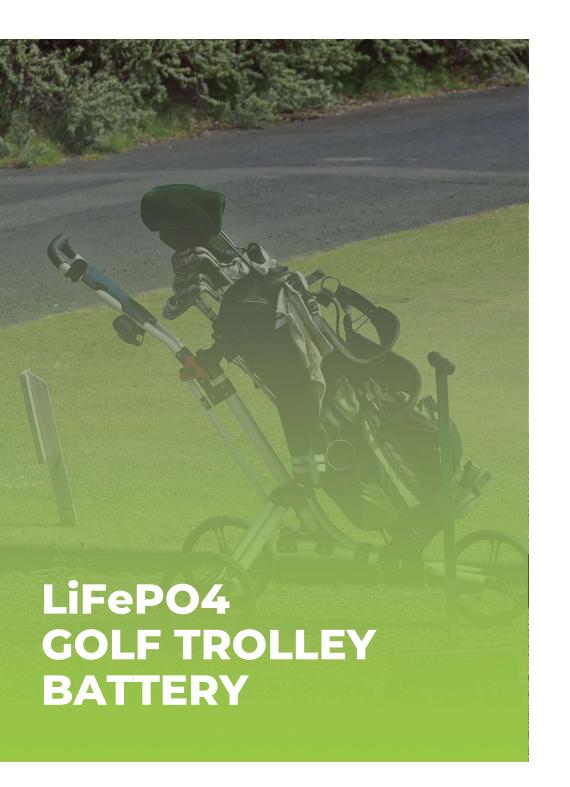
Put RoyPow LiFePO4 battery pack inside and fasten the pack to the bracket base.

#### 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



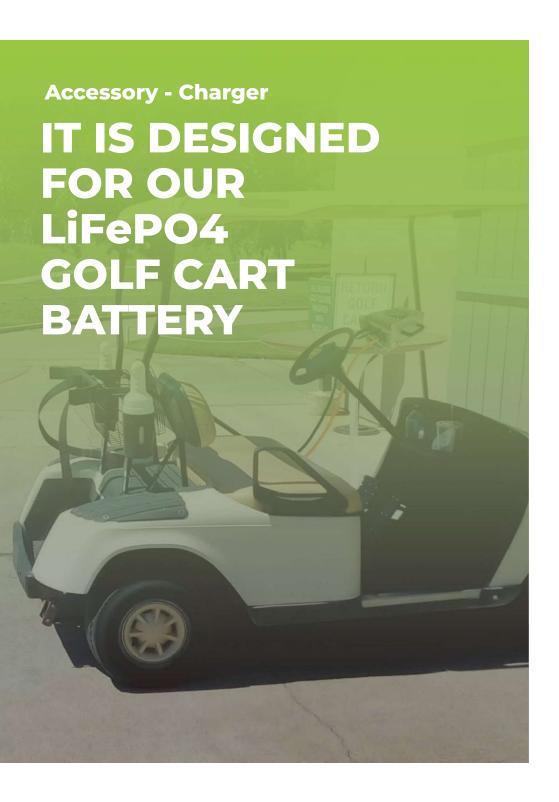


#### **Product Specification**

LiFePO4 BATTERY PACK	12.8V 24Ah
NOMINAL CAPACITY ( AT 0.2C DISCHARGE RATE)	24±1Ah
STORED ENERGY	307.2Wh
DISCHARGE NORMAL CURRENT	≤12A
DISCHARGE MAX CONTINUOUS CURRENT	≤18A (≤5min)
INNER RESISTANCE	≤20m Ω
CELL COMBINATION	4S4P
CASING MATERIAL	ABS/UL94_V0
WEIGHT	6.5lbs(2.95 kg)
DIMENSION (L*W*H, ±1, CM)	18 *16*12
CHARGE CURRENT	≤5A
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.









#### HIGH EFFICIENCY

22A 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**

	MAXIMUM DC OUTPUT VOLTAGE	58.2V
DC OUTPUT	MAXIMUM DC OUTPUT CURRENT	22.0A
DC 3011 01	MAXIMUM DC OUTPUT POWER	1,704W
	NOMINAL DC OUTPUT CURRENT	"22A @ 220VAC 22A @ 110VAC"

AC INPUT	AC INPUT VOLTAGE RANGE	AC90V-AC260V
	NOMINAL AC INPUT FREQUENCY	50 / 60Hz
	MAXIMUM AC INPUT CURRENT	13A
	POWER FACTOR	>0.9

MECHANICAL	BATTERY TYPE	Lithium
	DIMENSIONS	28.2 x 17 x 10cm (11.1 x 6.7 x 3.9")
	WEIGHT	10.4 lbs (4.7kg)
	COOLING	Active cooling with fan

	ENCLOSURE	IP66
	HUMIDITY	5% — 95%
ENVIRONMENTAL	OPERATING TEMPERATURE	"-4°F to 149°F (-20 °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.



## Upgrading to a new technology, with our turnkey solutions

years lithium-ion batteries dedication,
we are proud to offer customers professional battery solutions:

#### > Motive power battery solutions

including batteries for low speed vehicles, such as golf carts, automated guided vehicles; batteries for marine  $\vartheta$  boat, trolling motors and fish finders,

#### > Lithium-ion replacing lead-acid solutions

including batteries for various industrial applications, such as forklifts, aerial work platforms and floor cleaning machines.

#### > Energy storage solutions

including portable energy storage series, household energy storage series, truck air conditioner systems.

#### **Global sales and service network**

- > Timely delivery.
- > Hassle-free after-sale service.
- > Fast response technical support.

RoyPow has comprehensively unfolded its overseas market layout to realize the localization of R&D, manufacturing, marketing and service, then become your most reliable partner.

