

We greatly appreciate your acquisition of a Royce Energy product. Kindly be assured that the item has been meticulously crafted by adept technicians in South Africa, adhering to rigorous quality standards. The manufacturing process was meticulously carried out within an ISO9001 certified facility, aimed at providing you with the utmost sense of assurance and contentment.

Why Use Royce Energy Lithium Batteries?

- a) Premium "Grade A" LiFePO4 Cells
- b) Designed to Effectively Replace Conventional Lead Acid Battery Applications
- c) Offers a Superior Return on Investment in Comparison to Traditional Lead Acid Batteries
- d) Demonstrates Low Internal Resistance, Facilitating High Current Discharge Scenarios
- e) Capable of Withstanding 2000 Cycles at 100% Depth of Discharge (DOD)
- f) Equipped with an Integrated High-Current Battery Management System (BMS)

Description	Specification
Capacity in Ah	100Ah
Capacity in Wh	1.28kWh
Nominal Voltage	12.8v
Maximum Continuous Discharge Current	70 Amps
Peak Discharge Current (30 sec)	100 Amps
Charge Voltage	13.8-14.6V
Maximum Continuous Charge Current	40 Amps
Short circuit protection	Yes
Over Voltage Protection	Yes
Under Voltage Protection	Yes
Over Current protection	Yes
Charge Temperature	5°C – 45°C
Discharge Temperature	0°C – 45°C
Terminals	M8
Weight (net)	11.6kg
Dimension (L x W x H)	328 x 172 x 222 mm
Number of Cycles (minimum) 100% DOD	2000
Expected Life	10 Years

## Series Connection

#### 4 in Series Example

- a) Connect a maximum of 4 in series.
- b) Ensure all batteries are at the same state of charge by fully charging them individually.
- c) Never short circuit the batteries intentionally.



#### 51.2V 100Ah connection

# **Parallel Connection**

### 4 in Parallel Connection

- a) Connect a maximum of 4 in parallel.
- b) Ensure all batteries are at the same state of charge by fully charging them individually.
- c) Never short circuit the batteries intentionally.
- d) Do not exceed the maximum current draw on one battery when connected in parallel.



### 12.8V 200Ah Connection



Do not intentionally short circuit the batteries. Do not install the batteries in ceilings and close to roofing structures. Install the batteries at room temperature. Do not tamper with the battery. Do not burn or expose the battery to open flames. Do not expose the battery to liquids. Please dispose of the battery responsibly.



