



**100 Amp Hour**  
**LiFePO4**



Built-in BMS with Voltage, Temperature, Charge, Current, Short Circuit Protection and Bluetooth Monitoring.

Light weight and High Power Density—Half the weight of acid battery with twice the power density

Up to 2000 cycles at 100% Depth of Discharge — Up to 4000 at 80% Depth of Discharge

6 Year Warranty    Genuine Physical UK Company in Nottingham    Guaranteed Quality

We only use Genuine “Grade A” LiFePO4 Cells in this battery

## Voltage

Nominal Voltage \_\_\_\_\_ 12.8 V (Used for power calculations)

Charge Voltage \_\_\_\_\_ 14.2 V—14.7 V (GEL, AGM/SLA and Lithium Chargers work in this voltage range)

Low Voltage Cut-Off \_\_\_\_\_ 10.0 V (The battery will activate over-discharge protection at 10.5 V)

High Voltage Protection \_\_\_\_\_ 15.0 V (The battery will activate over-charge protection at 15.0 V)

## Current

Discharge                      Current \_\_\_\_\_ 100 Amps  
   Power \_\_\_\_\_ 1280 Watts (12.8 V x 100 Amps)  
   Pulse \_\_\_\_\_ 200 Amps (<1 Second) (Allows some devices to start up)

Charge                              Current \_\_\_\_\_ 50 Amps  
   Power \_\_\_\_\_ 640 Watts (12.8 V x 50 Amps)

## Temperature

This battery has a built in heater which will use CHARGE POWER ONLY to heat the cells, the heater does not use power from the battery. The battery enters low temperature mode at 3°C and exits low temperature mode at 5°C (Cell Temperature).

For best performance, keep the battery within the ranges below.

Charge Temperature \_\_\_\_\_ 0°C—45°C    (The temperature protection starts restricting charge at 3°C and 40°C)

Built – In Heater \_\_\_\_\_ YES    (for charging in cold conditions)

Discharge Temperature \_\_\_\_\_ -20°C—60°C    (The temperature protection starts restricting discharge at 3°C low and 40°C high)

Storage Temperature \_\_\_\_\_ 0°C—45°C    (storing too cold will cause faster self discharge and storing too hot over long periods will cause cell degradation)

## Physical Characteristics

Weight \_\_\_\_\_ 10.5KG

Dimensions \_\_\_\_\_ Length 354mm Width 176mm Height 187mm

Cells \_\_\_\_\_ LFP100000mAh @ 3.2 v

Pack Format \_\_\_\_\_ 4 cells in Series

Cell Type \_\_\_\_\_ Lightweight, High Power Density, Compact - Prismatic Packs

Outer Case \_\_\_\_\_ Impact resistant ABS plastic, UL94-Vo Flame Resistant

Terminal \_\_\_\_\_ M8 Threaded Insert

Water / Dust Resistance \_\_\_\_\_ IP67 (protection against dust particles and immersion up to 1 metre)

## Miscellaneous

Internal Resistance \_\_\_\_\_ 20 ≤mΩ

Self Discharge \_\_\_\_\_ Up to 3.5% per month

Series Connection \_\_\_\_\_ 4 in Series (up to 51.2v)

Automatic Cell Balancer \_\_\_\_\_ YES

Safe Transport \_\_\_\_\_ UN38.3 PASSED

European Conformity \_\_\_\_\_ 93/66/EEC