



100 Amp Hour LiFePO4 Battery



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

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 _____ 800 Amps (<3 Seconds) (Can support some cranking applications)

Charge Current _____ 50 Amps (recommended) 100 Amps (maximum)
 Power _____ 640 Watts (50 Amps) 1280 Watts (100 Amps)

Temperature

ALL Eco Tree batteries have temperature protection which will restrict charge and discharge when the cells are outside the optimal operating temperature. The further out of temperature range the battery goes the more aggressive the protection is.

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 _____ NO (for regular use in cold conditions, consider our heated batteries)

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 _____ 13.1KG

Dimensions _____ Length 330mm Width 173mm Height 220mm

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 \leq m Ω

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