



105 Amp Hour LiFePO4 Battery



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 10.0 V)

High Voltage Protection_____15.0 V (The battery will activate over-charge protection at 15.0 V)

Current

Maximum Discharge	Current_____100 Amps
	Power_____1280 Watts (12.8 V x 100 Amps)
	Pulse_____250 Amps (<3 Seconds) (essential to allow some devices to start up)

Maximum Charge	Current_____52.5 Amps
	Power_____672 Watts (12.8 V x 52.5 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_____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_____11.5KG

Dimensions_____Length 355mm Width 176mm Height 189mm

Cells_____LFP105000mAh @ 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_____SAE Round Post - also threaded for M8 screw (included)

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