



105 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

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

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 _____ 11.5KG

Dimensions _____ Length 330mm Width 172mm Height 215mm

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 _____ 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