



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 2500 cycles at 100% Depth of Discharge — Up to 5000 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_____300 Amps (<1 Second) (essential to allow some devices to start up)

Maximum 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—55°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—55°C (The temperature protection starts restricting discharge at 3°C low and 40°C high)

Storage Temperature_____0°C—35°C (storing too cold will cause faster self discharge and storing too hot over long periods will cause cell degradation)

Physical Characteristics

Weight_____10KG
Dimensions_____Length 308mm Width 170mm Height 216mm
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 $\leq$ m Ω Self Discharge_____Up to 3% 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