



110 Amp Hour

PART NO. EL12.8 - 110

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 3000 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” Cylindrical 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 _____ 10.5 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 _____ 200 Amps (<3 Seconds) (essential to allow some devices to start up)

Maximum Charge Current _____ 54 Amps
 Power _____ 691 Watts (12.8 V x 54 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 the heated version of this battery)

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 _____ 13.7KG

Dimensions _____ Length 355mm Width 176mm Height 189mm

Cells _____ LFR32700 - 6000mAh @ 3.2 v

Pack Format _____ 4 banks in Series, each bank contains 18 cells in Parallel

Cell Type _____ Cylindrical, Stainless Steel, Individually fused, Explosion Proof, Completely Sealed

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

Terminal _____ SAE Automotive Post—Highly conductive corrosion resistant alloy

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

Miscellaneous

Internal Resistance _____ 30 \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