



24 Amp Hour

PART NO. EL12.8 - 24

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 _____ 24 Amps
 Power _____ 307 Watts (12.8 V x 24 Amps)
 Pulse _____ 60 Amps (<3 Seconds) (essential to allow some devices to start up)

Maximum Charge Current _____ 12 Amps
 Power _____ 153 Watts (12.8 V x 12 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, our 100AH heated 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 _____ 2.9KG

Dimensions _____ Length 181mm Width 77mm Height 167mm

Cells _____ LFR32700 - 6000mAh @ 3.2 v

Pack Format _____ 4 banks in Series, each bank contains 4 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 _____ M5 Threaded Insert

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

Miscellaneous

Internal Resistance _____ 60 \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