



33 Amp Hour

PART NO. EL12.8 - 33

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_____30 Amps
 Power_____384 Watts (12.8 V x 30 Amps)
 Pulse_____60 Amps (<3 Seconds) (essential to allow some devices to start up)

Maximum Charge Current_____16.5 Amps
 Power_____211 Watts (12.8 V x 16.5 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_____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_____4.9KG

Dimensions_____Length 195mm Width 130mm Height 167mm

Cells_____LFR26650 - 3600mAh @ 3.2 v

Pack Format_____4 banks in Series, each bank contains 10 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_____M6 Threaded Insert

Water / Dust Resistance_____IP67 (protection against dust particles and immersion up to 1 metre)

Miscellaneous

Internal Resistance_____55 \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