

LiFePO₄ **12V**
100Ah



POWERFUL, DURABLE
LIGHTWEIGHT, RECYCLABLE
APPROVED

Lithium Iron Phosphate Battery

ESSENTIAL

BY ACELERON

ENERGY STORAGE THAT YOU CAN'T GO WITHOUT

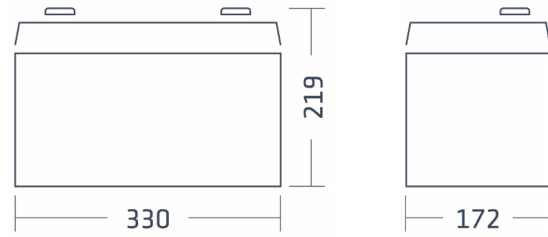
ESSENTIAL BENEFITS

- + Drop-in replacement**
Engineered as a perfect replacement for lead-acid batteries
- + Longer life**
Up to 5,000 cycles at 50% DoD for up to 20 years
- + Fast Charging**
Fully charged in as little as 2 hours
- + Lightweight**
15 kg, which is less than half of the weight of a lead-acid battery
- + Intelligent management**
Built with safety shut-down for battery protection
- + Environmentally friendly**
We promise to reuse or recycle every battery that is returned to us. No exceptions!
- + Made in the UK**
Designed with passion, built with care, in the UK.

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INTERTEK UN38.3 APPROVED



TECHNICAL DATA



ESSENTIAL 12V 100Ah LiFePO₄ dimensions in mm

OPERATING CONDITIONS	
Nominal Voltage	12.8 V
Nominal Capacity	100 Ah
Total Energy	1.28 kWh
Impedance	7 mΩ
Self Discharge	~3% per month
Flexibility	Up to 10 batteries in parallel and 4 batteries in series
Cycle Life	Up to 5,000 cycles

MECHANICAL	
Chemistry	Cylindrical - LiFePO ₄
Case Dimensions	L330 x W172 x H219 mm
Weight	15 kg
Terminal Type	M8 Insert
Casing Type	Hard case
Casing	IP66 compliant

BATTERY MANAGEMENT	
BMS Type	Passive
BMS Location	Internal
Balance Current per Cell	65 mA
Overcharge / Discharge Current	160 A
Sleep Mode Current	350 μA

DISCHARGE	
Maximum Continuous Discharge Current	100 A
Peak Discharge Current	150 A
BMS Discharge Current Cut-Off	160 A
Low Voltage Cut-Off	10 V
Short Circuit Protection	200-500μs

CHARGE	
Recommended Charge Current	50 A
Peak Charge Current	100 A
BMS Charge Current Cut-Off	100 A
Fully Charged Voltage	14.4 V

TEMPERATURE	
Storage Temperature	-20 to 60°C
Discharge Temperature Range	-10 to 60°C
Charge Temperature Range	0 to 45°C

SAFETY	
Transportation Classification	UN3480, Class 9
Battery Certification	CE, UN38.3, RoHS
BMS Certification	IEC62133
UN Certification (Cells)	UN38.3
UL Certification (Cells)	UL1642

