

VOLTA'S

LITHIUMPOWER



LITHIUM IRON PHOSPHATE BATTERY

ELECTRICAL SPECIFICATIONS

Nominal Voltage	12.8V
Nominal Capacity	100Ah
Capacity @ 20 A	300min
Energy	1280Wh
Resistance	$\leq 30m\Omega @ 50\% SOC$
Efficiency	99%
Self Discharge	<3.5% per Month
Maximum Modules in Series Or Parallel	

DISCHARGE SPECIFICATIONS

Maximum Continuous Discharge Current	100A
Peak Discharge Current	260 A ($\leq 5s$)
BMS Discharge Current Cut-Off	300A $\pm 50A$ ($2 \pm 1ms$)
Recommended Low Voltage Disconnect	8V
BMS Discharge Voltage Cut-Off	8 V ($2.0 \pm 0.08 vpc$) ($100 \pm 50 ms$)
Reconnect Voltage	10V ($2.5 \pm 0.1 vpc$)
Short Circuit Protection	200-400 μs

TEMPERATURE SPECIFICATIONS

Discharge Temperature	-4 to 140 °F (-20 to 60 °C)
Charge Temperature	32 to 113 °F (0 to 45 °C)
Storage Temperature	23 to 95 °F (-5 to 35 °C)
BMS High Temperature Cut-Off (discharge)	149 °F (65 °C) (Customized)
Reconnect Temperature	122 °F (50 °C) (Customized)
Low Temperature Cut-Off (Charge)	32 °F (0 °C) (Customized)
High Temperature Cut-Off (Charge)	129.2 °F (54 °C) (Customized)

DIMENSIONAL SPECIFICATIONS

Length(mm)	260
Width(mm)	170
Height(mm)	210
Total Height(mm)	215
Approx. Weight(Kg)	10

MECHANICAL SPECIFICATIONS

Dimensions (L x W x H)	260 * 168 * 211 mm
Weight	11.5KG
Terminal Type	M8
Case Material	ABS
Enclosure Protection	IP56
Cell Type	Prismatic
Chemistry	LifePO4
Configuration	4S1P

CHARGE SPECIFICATIONS

Recommended Charge Current	50A
Maximum Charge Current	100A
Recommended Charge Voltage	14.6V
BMS Charge Voltage Cut-Off	15.6V ($3.9 \pm 0.1V$)
Reconnect Voltage	15.2V ($3.8 \pm 0.1V$)
Balancing Voltage	14.4 V ($3.6 \pm 0.025 vpc$)
Balancing Current	35 $\pm 5mA$

COMPLIANCE SPECIFICATIONS

Certifications	CE (battery) UN38.3 (battery) UL1973 & IEC62133 (cells)
Shipping Classification	UN 3480 CLASS 9