

# EV Power ESS48V100AH Specification



## Features

- Energy Storage System (ESS) Modular Battery
- 48V (51.2V) Safe Lithium Chemistry, 16S prismatic LiFePO4 cells.
- 19" Rack Mount 3U module
- Simple to install and use, integrated full Battery Management System.
- Can be connected in parallel for more storage.
- For use in DC or AC Coupled Solar Energy Storage systems.
- Usable with a wide range of inverters and solar charge controllers.
- Pre-charge control, soft start up to protect inverters from power-on surge damage.
- SOC Display
- CANbus communications
- 5 Year Factory Warranty with ongoing Australian support

## Specification

Parameter	Property
Nominal DC Voltage	51.2V
Operational Voltage Window	44.0V – 60V
Nominal Capacity (0.1C)	5.12kWh
Recommended Regular Usable capacity	4.10kWh
Recommended Depth of Discharge (DOD)	<80%
Recommended Continuous Discharge Current / Power	50A / 2.5kW
Recommended Maximum Discharge Current / Power	100A / 5kW
Maximum Charge Current / Power	50A / 2.5kW
Fault Current (1mS)	210A / 0.5mS
Circuit Breaker (k Curve)	2-Pole
Cell Chemistry	Prismatic Lithium Ferro Phosphate (LFP, LiFePO4)
Maximum Operating Temperature Range	-20°C to +70°C
Ideal Temperature Range	20°C to 30°C
Maximum Operating Humidity	85% Non Condensing
BMS Cell Overvoltage Protection	>3.50V (open charge FETs)
BMS Cell Undervoltage Protection	<2.80V (open discharge FETs)
BMS Over Temp Cutoff	60°C

Parameter	Property
BMS Max Trip Current	120A
Self Discharge	BMS only <30mA (ON), <0.5mA(OFF)
Maximum Altitude	2000m
Battery Mounting	19" Rack mount, 3U
Terminal Connections	M6 Stainless Bolts
Environmental IP Rating	IP40
Charge Efficiency	98.00%
Cooling	Natural Convection
Parallel Connection	Unlimited (16P for CAN communications link)
Series Connection	Forbidden
Communications	Proprietary CANbus Protocol
Mass	50kg
Dimensions	450(w) x 530(l) x 135(h) mm

Note: Specifications may be subject to change without notice.