



## Model: JK48V100PRO LiFePO4 Battery Specification

### The JK48V100PRO LiFePO4 Jakiper Battery

One of the highest quality and safest lithium ion technology at the fairest price on the market.

#### ELECTRICAL PERFORMANCE

Model	JK48V100PRO
Nominal Voltage	51.2 V
Nominal Capacity	100 Ah
Energy	5120 Wh
Resistance	< 50mΩ
Self Discharge	< 3%
Cells	3.2V 100Ah Cells

#### CHARGE PERFORMANCE

Recommended Charge Current	20 A
Maximum Charge Current	100 A
Recommended Charge Voltage	56(initial charge)-58.4 V (after 30 cycles)
BMS Charge Cut-Off Voltage	> 59.2 V (3.7 V/Cell)
Reconnect Voltage	< 54.08 V (3.38 V/Cell)
Balancing Voltage	> 54.4 V (3.4 V/Cell)

#### DISCHARGE PERFORMANCE

Maximum Continuous Discharge Current	100 A
BMS Discharge Current High Warning	125 A
BMS Discharge Cut-Off Current	130 A (1000ms)
Low Voltage Warning	44.8 V ( 2.8 V/Cell*16)
BMS Discharge Cut-Off Voltage	<40 V (1 s) ( 2.5 V/Cell*16)
Reconnect Voltage	>46.4 V ( 2.9 V/Cell)
Short Circuit Protection	300 μs



SMART Battery Management System

#### MECHANICAL PERFORMANCE

Dimension (LxWxH)	442x460x177mm
Approx. Weight	48 Kg
Terminal Type	M8x4
Terminal Torque	106 ~ 132 in-lbs ( 12 ~ 15 N·m )
Case Material	Steel
Recommended Connection Wire	6 AWG

#### TEMPERATURE PERFORMANCE

Temperature Sensor Quantity	6 pcs
Discharge Temperature	- 4 ~ 140 °F ( - 20 ~ 60 °C )
Charge Temperature	23 ~ 131 °F ( - 5 ~ 55 °C )
Storage Temperature	23 ~ 95 °F ( - 5 ~ 35 °C )
BMS High Temperature Cut-Off	149 °F ( 65 °C )
Reconnect Temperature	140 °F ( 60 °C )

### Lithium Upgrade and Install Tips

- Consult with your battery supplier or dealer to confirm compatibility with your system components, including converters, solar charge controllers and inverter chargers.
- Only purchase lithium batteries that have a Battery Management System built in.

### Benefits

- At least double the power in the same physical space of lead acid.
- Can be discharged 100% vs lead acid recommended 50% depth of discharge.
- Can be installed indoors with no hydrogen gases generated, also no terminal corrosion.
- About 1/5 the weight of a lead acid battery, resulting in a significant weight reduction over your current battery bank.
- Output voltage is flat during most of the discharge cycle, increasing efficiency of your system.
- Can be charged up to 5 times faster than lead acid.
- Last 10 times longer than lead acid.
- Holds a charge for up to 1 year (without a load) without the need for a trickle charger. Great for unattended storage.

#### OPSOLAR LIMITED

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