LiFePO4 Battery Specification

Orient Power

Model: OP24V100

ELECTRICAL PERFORMANCE	
Model	OP24V100
Nominal Voltage	25.6 V
Nominal Capacity	100 Ah
Energy	2560 Wh
Resistance	< 50mΩ
Self Discharge	< 3%
Cells	3.2V 100Ah Cells

CHARGE PERFORMANCE	
Recommended Charge Current	20 A
Maximum Charge Current	110 A
Recommended Charge Voltage	29.2V
BMS Charge Cut-Off Voltage	> 29.6V (or 3.7 V/Cell)
Reconnect Voltage	< 27.04V (or all cell <3.38 V)
Balancing Cell Voltage	> 3.5V (Cell difference >30mV)

MECHANICAL PERFORMANCE	
Dimension (LxWxH)	442x385x133mm
Approx. Weight	26 Kg
Terminal Type	M8x4
Terminal Torque	106 ~ 132 in-lbs (12 ~ 15 N·m)
Case Material	Steel
Recommended Connection Wire	6 AWG

DISCHARGE PERFORMANCE	
Maximum Continuous Dishcarge Current	100 A
BMS Discharge Current High Warning	105 A
BMS Discharge Cut-Off Current	110 A (1000ms)
Low Voltage Warning	22.4 V (or Cell <2.8 V)
BMS Discharge Cut-Off Voltage	<20V (1 s) (or Cell <2.5V)
Reconnect Voltage	>23.6 V (or all cell >2.95 V)
Short Circuit Protection	300 μs
80%DOD, discharge with standard 0.5C, the cycle life is 7000 times.	

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)

PRODUCT VIEW

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.
- Confirm that your new battery bank can handle the loads of your system before buying it.

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.

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