Orient Power

# LiFePO4 Battery Specification

## Model: OP48V230

| ELECTRICAL PERFORMANCE | |
|---|---|
| Model | OP48V230 |
| Nominal Voltage | 51.2 V |
| Nominal Capacity | 230 Ah |
| Energy | 11776 Wh |
| Resistance | < 50mΩ |
| Self Discharge | < 3% |
| Cells | 3.2V 230Ah Cells |

| CHARGE PERFORMANCE | |
|---|---|
| Recommended Charge Current | 50 A |
| Maximum Charge Current | 160 A |
| Recommended Charge Voltage | 56-58.4 V |
| BMS Charge Cut-Off Voltage | > 58.4V (or 3.7 V/Cell) |
| Reconnect Voltage | < 54V (or all cell <3.38 V) |
| Balancing Cell Voltage | > 3.4V (and Cell difference >20mV) |

| DISCHARGE PERFORMANCE | |
|---|---|
| Maximum Continuous Dishcarge Current | 200 A |
| BMS Discharge Current High Warning | 205 A |
| BMS Discharge Cut-Off Current | 230 A (5000ms) |
| Low Voltage Warning | 44 |
| BMS Discharge Cut-Off Voltage | <42V (1 s) (or Cell <2.5V) |
| Reconnect Voltage | >47.2 V ( or all cell >2.95 V) |
| Short Circuit Protection | 300 μs |


| MECHANICAL PERFORMANCE | |
|---|---|
| Dimension (LxWxH) | 440*573*245mm |
| Approx. Weight | 85 Kg |
| Terminal Type | M8x4 |
| Terminal Torque | 106 ~ 132 in-lbs ( 12 ~ 15 N·m ) |
| Case Material | Steel |
| Recommended Connection Wire | 4 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 ) |

## 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.

## OPSOLAR LIMITED

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