

LITHIUM BATTERY 5.12/7.68/10.24KWH LiFePO4



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LITHIUM BATTERY 5.12KWH LiFePO4



FEATURES

Longer Cycle Life:

Offers up to 20 times longer cycle life and five times longer float/calendar life than lead acid battery, helping to minimize replacement cost and reduce total cost of ownership

Lighter Weight:

About 40% of the weight of a comparable lead acid battery. A'drop in' replacement for lead acid batteries.

Higher Power:

Delivers twice power of lead acid battery, even high discharge rate, while maintaining high energy capacity.

Wider Temperature Range:

-20°C~60°C

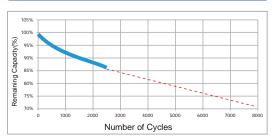
Superior Safety:

Lithium Iron Phosphate chemistry eliminates the risk of explosion or combustion due to high impact, overcharging or short circuit situation.

APPLICATION

- Electric vehicles, electric mobility
- Solar/wind energy storage system
- UPS, backup power
- Telecommunication
- Medical equipment
- Lighting

Cycle Life Curve



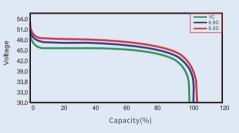
SPECIFICATION

| Electrical Characteristics | Nominal Voltage | 51.2V |
|-------------------------------|---------------------------|---|
| | Nominal Capacity | 100Ah (C₅,25°C) |
| | Energy | 5120Wh |
| | Internal Resistance | <50mΩ |
| | Cycle Life | >10000 cycles @25°C |
| | Months Self Discharge | <3% |
| | Efficiency of Charge | 100% @0.2C |
| | Efficiency of Discharge | 96~99% @1C |
| Standard Charge | Charge Voltage | 58.4V |
| | Charge Mode | 0.2C to 58.4V, then 58.4V charge current 0.02C(CC/CV) |
| | Charger Current | 20A |
| | Max. Charge Current | 50A |
| | Charge Cut-off Voltage | <59.2V |
| Standard Discharge | Continuous Current | 50A |
| | Max. Pulse Current | 110A(<3s) |
| | Discharge Cut-off Voltage | 44V |
| Environmental | Charge Temperature | 0°C to 45°C (32F to 113F) @60±25% Relative Humidity |
| | Discharge Temperature | -20°C to 60°C (-4F to 140F) @60±25% Relative Humidity |
| | Storage Temperature | 0°C to 40°C (32F to 104F) @60±25% Relative Humidity |
| | Water Dust Resistance | |
| Mechanical | Cell & Method | 3.2V50AH-16S2P |
| | Plastic Case | |
| | Dimensions (in./mm.) | 600*420*210±2mm |
| | Weight (lbs./kg.) | 53Kg |
| | Terminal | 180A terminal |
| | Protocol (optional) | RS485/CAN |
| | BMS | 16S100A |

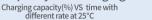
Model Performance Diagrams

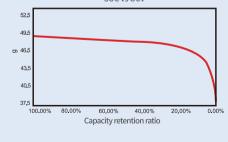
Dumber of Cycles Vs. DOD Cycle life with DOD at 25°C, 0.5C

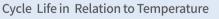
Discharge Performance at R.T.

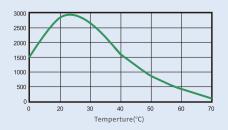


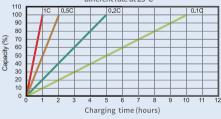
Battery Capacity (C) VS. Open Circuit Voltage (OCV) Battery Capacity Vs. Charging Time



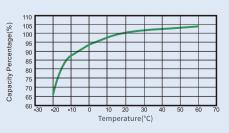








Temperature Effects on Capacity



LITHIUM BATTERY 7.68KWH LiFePO4



FEATURES

Longer Cycle Life:

Offers up to 20 times longer cycle life and five times longer float/calendar life than lead acid battery, helping to minimize replacement cost and reduce total cost of ownership.

Lighter Weight:

About 40% of the weight of a comparable lead acid battery. A'drop in' replacement for lead acid batteries.

Higher Power:

Delivers twice power of lead acid battery, even high discharge rate, while maintaining high energy capacity.

Wider Temperature Range:

-20°C~60°C

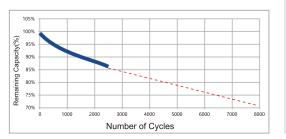
Superior Safety:

Lithium Iron Phosphate chemistry eliminates the risk of explosion or combustion due to high impact, overcharging or short circuit situation.

APPLICATION

- Electric vehicles, electric mobility
- Solar/wind energy storage system
- UPS, backup power
- Telecommunication
- Medical equipment
- Lighting

Cycle Life Curve

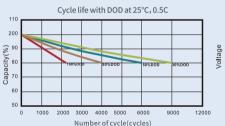


SPECIFICATION

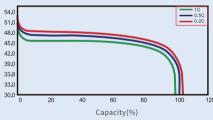
| Electrical Characteristics | Nominal Voltage | 51.2V |
|-------------------------------|---------------------------|---|
| | Nominal Capacity | 150Ah (C₅,25°C) |
| | Energy | 7680Wh |
| | Internal Resistance | <50mΩ |
| | Cycle Life | >10000 cycles @25°C |
| | Months Self Discharge | <3% |
| | Efficiency of Charge | 100% @0.2C |
| | Efficiency of Discharge | 96~99% @1C |
| Standard Charge | Charge Voltage | 58.4V |
| | Charge Mode | 0.2C to 58.4V, then 58.4V charge current 0.02C(CC/CV) |
| | Charger Current | 20A |
| | Max. Charge Current | 50A |
| | Charge Cut-off Voltage | <59.2V |
| Standard Discharge | Continuous Current | 75A |
| | Max. Pulse Current | 110A(<3s) |
| | Discharge Cut-off Voltage | 44V |
| Environmental | Charge Temperature | 0°C to 45°C (32F to 113F) @60±25% Relative Humidity |
| | Discharge Temperature | -20°C to 60°C (-4F to 140F) @60±25% Relative Humidity |
| | Storage Temperature | 0°C to 40°C (32F to 104F) @60±25% Relative Humidity |
| | Water Dust Resistance | |
| Mechanical | Cell & Method | 3.2V50AH-16S2P |
| | Plastic Case | |
| | Dimensions (in./mm.) | 600*420*210±2mm |
| | Weight (lbs./kg.) | 75Kg |
| | Terminal | 180A terminal |
| | Protocol (optional) | RS485/CAN |
| | BMS | 16S100A |

Model Performance Diagrams

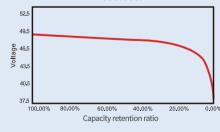
Number of Cycles Vs. DOD



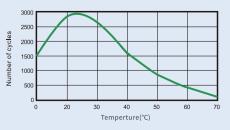
Discharge Performance at R.T.

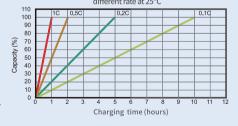


Battery Capacity (C) VS. Open Circuit Voltage (OCV) Battery Capacity Vs. Charging Time SOC Vs OCV

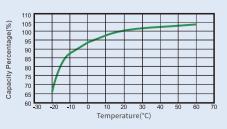








Temperature Effects on Capacity



LITHIUM BATTERY 10.24KWH LiFePO4



FEATURES

Longer Cycle Life:

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Lighter Weight:

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Wider Temperature Range:

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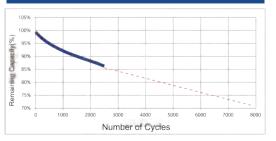
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APPLICATION

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- Medical equipment
- Lighting

Cycle Life Curve

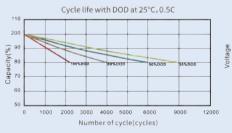


SPECIFICATION

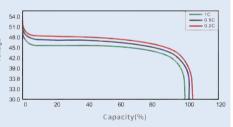
| Electrical Characteristics | Nominal Voltage | 51.2V |
|-------------------------------|---------------------------|---|
| | Nominal Capacity | 200Ah (C₅,25°C) |
| | Energy | 10240Wh |
| | Internal Resistance | <50mΩ |
| | Cycle Life | >10000 cycles @25°C |
| | Months Self Discharge | <3% |
| | Efficiency of Charge | 100% @0.2C |
| | Efficiency of Discharge | 96~99% @1C |
| Standard Charge | Charge Voltage | 58.4V |
| | Charge Mode | 0.2C to 58.4V, then 58.4V charge current 0.02C(CC/CV) |
| | Charger Current | 20A |
| | Max. Charge Current | 50A |
| | Charge Cut-off Voltage | <59.2V |
| Standard Discharge | Continuous Current | 90A |
| | Max. Pulse Current | 110A(<3s) |
| | Discharge Cut-off Voltage | 44V |
| Environmental | Charge Temperature | 0°C to 45°C (32F to 113F) @60±25% Relative Humidity |
| | Discharge Temperature | -20°C to 60°C (-4F to 140F) @60±25% Relative Humidity |
| | Storage Temperature | 0°C to 40°C (32F to 104F) @60±25% Relative Humidity |
| | Water Dust Resistance | |
| Mechanical | Cell & Method | 3.2V50AH-16S2P |
| | Plastic Case | |
| | Dimensions (in./mm.) | 860*540*160±2mm |
| | Weight (lbs./kg.) | 85Kg |
| | Terminal | 180A terminal |
| | Protocol (optional) | RS485/CAN |
| | BMS | 16S100A |

Model Performance Diagrams

Number of Cycles Vs. DOD



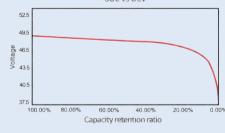
Discharge Performance at R.T.



Battery Capacity (C) VS. Open Circuit Voltage (OCV) Battery Capacity Vs. Charging Time

20

Capacity (%)





40

Temperture(°C)

50

60

70

3000

2500

2000

1500

1000

500

0

20

30

Number of cycles

Temperature Effects on Capacity

Charging time (hours)

