

LITHIUM BATTERY

5.12/7.68/10.24/12.80/15.36KWH 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

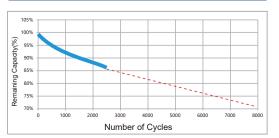
Superior Safety:

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



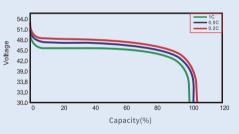
SPECIFICATION

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
	Charge Voltage	58.4V
	Charge Mode	0.2C to 58.4V, then 58.4V charge current 0.02C(CC/CV)
Standard Charge	Charger Current	20A
	Max. Charge Current	50A
	Charge Cut-off Voltage	<59.2V
	Continuous Current	50A
Standard Discharge	Max. Pulse Current	110A(<3s)
	Discharge Cut-off Voltage	44V
	Charge Temperature	0°C to 45°C (32F to 113F) @60±25% Relative Humidity
Environmental	Discharge Temperature	-20°C to 60°C (-4F to 140F) @60±25% Relative Humidity
Linnonnentar	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

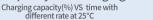
Model Performance Diagrams

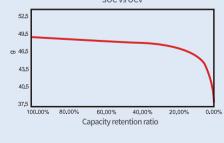
Dumber of Cycles Vs. DOD Cycle life with DOD at 25°C, 0.5C

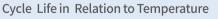
Discharge Performance at R.T.

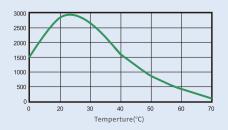


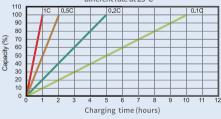
Battery Capacity (C) VS. Open Circuit Voltage (OCV) Battery Capacity Vs. Charging Time



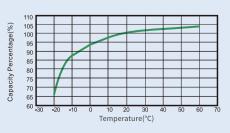








Temperature Effects on Capacity



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

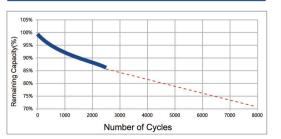
Superior Safety:

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



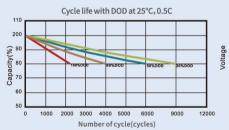
SPECIFICATION

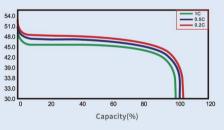
Electrical Characteristics	Nominal Voltage	51.2V
	Nominal Capacity	150Ah (C₅,25°C)
	Energy	7680Wh
	Internal Resistance	<50mΩ
	Cycle Life	>10000 cycles @25°C
	Months Self Discharge	<3%
	Efficiency of Charge	100% @0.2C
	Efficiency of Discharge	96~99% @1C
	Charge Voltage	58.4V
	Charge Mode	0.2C to 58.4V, then 58.4V charge current 0.02C(CC/CV)
Standard Charge	Charger Current	20A
	Max. Charge Current	50A
	Charge Cut-off Voltage	<59.2V
	Continuous Current	75A
Standard Discharge	Max. Pulse Current	110A(<3s)
	Discharge Cut-off Voltage	44V
	Charge Temperature	0°C to 45°C (32F to 113F) @60±25% Relative Humidity
Environmental	Discharge Temperature	-20°C to 60°C (-4F to 140F) @60±25% Relative Humidity
Environmental	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

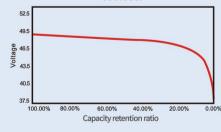
Number of Cycles Vs. DOD

Discharge Performance at R.T.

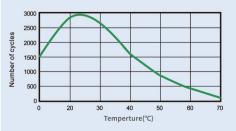


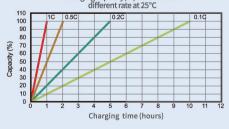


Battery Capacity (C) VS. Open Circuit Voltage (OCV) Battery Capacity Vs. Charging SOC VS OCV Charging Charging capacity (%) VS time with different rate at 25°C Charging Cha

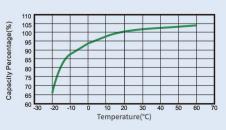








Temperature Effects on Capacity



LITHIUM BATTERY 10.24KWH 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

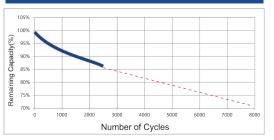
Superior Safety:

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

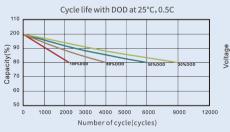


SPECIFICATION

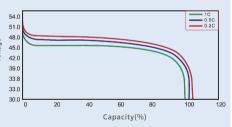
Electrical Characteristics	Nominal Voltage	51.2V
	Nominal Capacity	200Ah (C₅,25°C)
	Energy	10240Wh
	Internal Resistance	<50mΩ
	Cycle Life	>10000 cycles @25°C
	Months Self Discharge	<3%
	Efficiency of Charge	100% @0.2C
	Efficiency of Discharge	96~99% @1C
	Charge Voltage	58.4V
	Charge Mode	0.2C to 58.4V, then 58.4V charge current 0.02C(CC/CV)
Standard Charge	Charger Current	20A
	Max. Charge Current	50A
	Charge Cut-off Voltage	<59.2V
	Continuous Current	90A
Standard Discharge	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



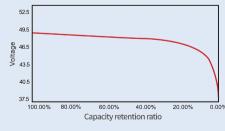
Discharge Performance at R.T.



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

20

Capacity (%)





3000

2500

2000

1500

1000

500

0

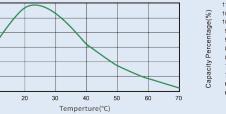
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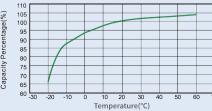
Number of cycles

Temperature Effects on Capacity

Charging time (hours)

10 11







LITHIUM BATTERY 12.80KWH 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

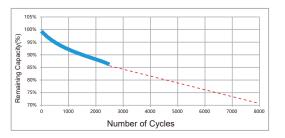
Superior Safety:

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



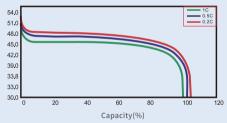
SPECIFICATION

Electrical Characteristics	Nominal Voltage	51.2V
	Nominal Capacity	250Ah (C₅,25°C)
	Energy	12000Wh
	Internal Resistance	<50mΩ
	Cycle Life	>6000 cycles @25°C
	Months Self Discharge	<3%
	Efficiency of Charge	100% @0.2C
	Efficiency of Discharge	96~99% @1C
	Charge Voltage	54.4-58.4V
	Charge Mode	0.2C(CC/CV)
Standard Charge	Charger Current	40A
	Max. Charge Current	50A (When the charging current is greater than 55A, turn on the current limiting, and limit the current by 10A)
	Charge Cut-off Voltage	<59.2V
	Continuous Current	100A
Standard Discharge	Max. Pulse Current	150A(<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
Environmentai	Storage Temperature	0°C to 40°C (32F to 104F) @60±25% Relative Humidity
	Water Dust Resistance	
Mechanical	Cell & Method	3.2V63AH-16S4P
	Plastic Case	
	Dimensions (in./mm.)	860*620*200±2mm
	Weight (lbs./kg.)	105Kg
	Terminal	180A terminal
	Protocol (optional)	RS485/CAN
	BMS	16S100A

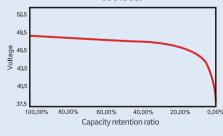
Model Performance Diagrams

Cycle life with DOD at 25°C, 0.5C

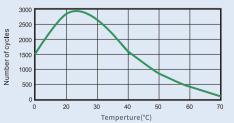
Discharge Performance at R.T.

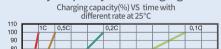


Battery Capacity (C) VS. Open Circuit Voltage (OCV) Battery Capacity Vs. Charging Time



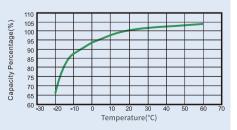
Cycle Life in Relation to Temperature







Temperature Effects on Capacity





LITHIUM BATTERY 15.36KWH 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

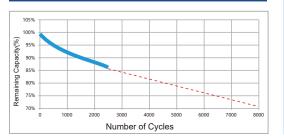
Superior Safety:

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

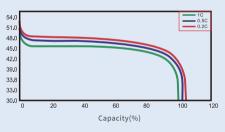
Electrical Characteristics	Nominal Voltage	51.2V
	Nominal Capacity	300Ah (C₅,25°C)
	Energy	15000Wh
	Internal Resistance	<50mΩ
	Cycle Life	>6000 cycles @25°C
	Months Self Discharge	<3%
	Efficiency of Charge	100% @0.2C
	Efficiency of Discharge	96~99% @1C
	Charge Voltage	57.6V
	Charge Mode	0.2C (CC/CV)
Standard Charge	Charger Current	40A
	Max. Charge Current	120A (When the charging current is greater than 55A, turn on the current limiting, and limit the current by 10A)
	Charge Cut-off Voltage	<59.2V
	Continuous Current	100A
Standard Discharge	Max. Pulse Current	150A(<3s)
	Discharge Cut-off Voltage	44V
	Charge Temperature	0°C to 45°C (32F to 113F) @60±25% Relative Humidity
Environmental	Discharge Temperature	-20°C to 60°C (-4F to 140F) @60±25% Relative Humidity
Environmental	Storage Temperature	0°C to 40°C (32F to 104F) @60±25% Relative Humidity
	Water Dust Resistance	
Mechanical	Cell & Method	3.2V63AH-16S4P
	Plastic Case	
	Dimensions (in./mm.)	860*620*200±2mm
	Weight (lbs./kg.)	105Kg
	Terminal	180A terminal
	Protocol (optional)	RS485/CAN
	BMS	16S100A

Model Performance Diagrams

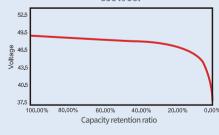
Number of Cycles Vs. DOD

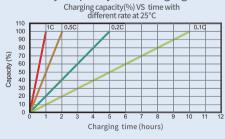
Cycle life with DOD at 25°C, 0.5C 110 200 city(%) Voltage Capa C 60 50 1000 2000 3000 4000 5000 6000 9000 12000 Number of cycle(cycles)

Discharge Performance at R.T.

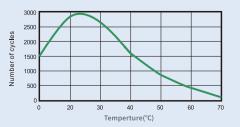


Battery Capacity (C) VS. Open Circuit Voltage (OCV) Battery Capacity Vs. Charging Time





Cycle Life in Relation to Temperature



Temperature Effects on Capacity

