

KEEP KNOW

Golf Cart LiFePO₄ Battery







USER MANUAL

— 38.4V 51.2V 73.6V Series

KEEP KNOW

Read Before

			
Heavy Object Team Lift Required	High Voltage Handle With Care	Do Not Pressure Wash Or Submerge	Charge Battery Before Use

Charge

- Before using for the first time, please fully charge the battery to calibrate the SOC.
- When the SOC drops to 10%, please charge it in time.
- If the battery is fully discharged, be sure to charge it within 24 hours.
- Please use an appropriate lithium battery charger to charge the battery.

Warning

- High Voltage. DO NOT install or service this battery unless you are properly trained.
- Use only with components that have the same voltage and current rating as the battery.
- DO NOT touch or connect to the terminals unless the battery is manually turned off.
- DO NOT open or attempt to service the battery, there are no user serviceable parts inside.

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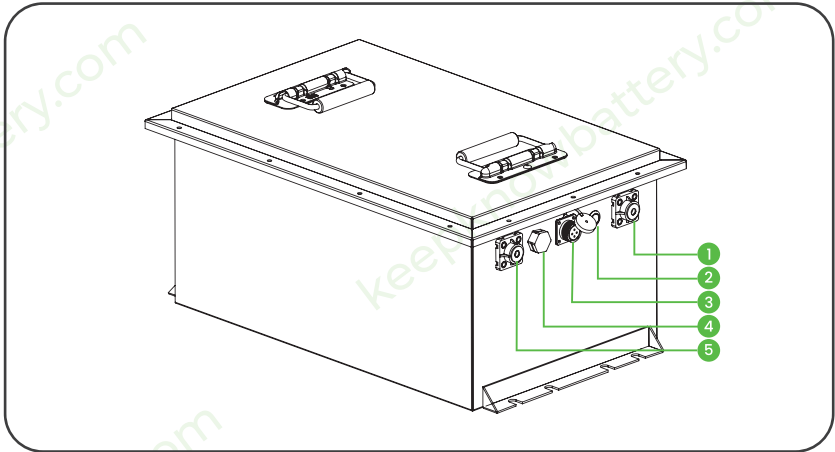
09 Technical Specifications

Product Specifications09

1. Electrical Layout

The battery is equipped with an integrated battery management system with the following features:

- Cell balancing.
- Battery voltage monitoring.
- Battery current monitoring.
- Battery temperature monitoring (integrated temperature sensor).
- Support Bluetooth APP to monitor the battery in real time.



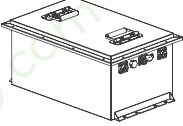
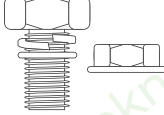

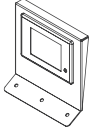
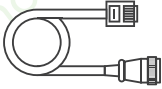

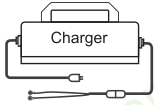
No.	Label	Describe
1	⊖	Negative Terminal
2	SWITCH	Battery Power
3	RS485	External Display Plug
4	VENT	VENT
5	⊕	Positive Terminal

2. Packing List

Check the PACK package before open it. If any abnormality is detected, do not open the Package and contact us.

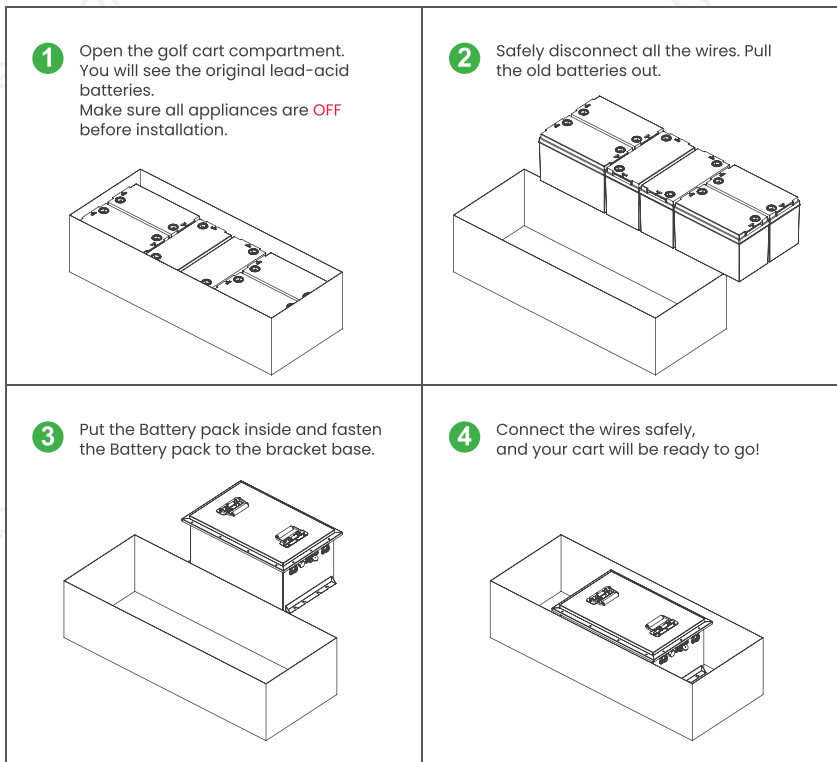
Check the quantity of all parts inside according to the package list. If there is any part missing or damaged, please contact us.

Accessories are optional. The accessories you ordered will be included in the package.

1	<p>Golf Cart LiFePO4 Battery</p> 	2	<p>M6 Screw X 8</p> 
3	<p>User Manual</p> 	4	<p>LCD Display & Holder</p> 
5	<p>RS485 Cable</p> 	6	<p>Self Tapping Screw X6</p> 
7	<p>LiFePO4 Battery Charger X 1</p> 	<p>Note: 51.2V 150Ah, 51.2V 160Ah, 73.6V 105Ah. The above battery models do not include a battery charger in the package, and the battery charger will have an additional package.</p>	

3. Installation

- Make sure all electrical appliances are turned off before installation.
- Only authorized personnel are allowed to operate or adjust the battery.
- Please fully secure the battery during installation, and do not leave it hanging or shaking.
- Please install the power cables and charger cable to the battery together, pay attention to distinguish the positive and negative poles, and cover the insulation cover.
- Install the communication cable for communication with the golf cart controller (if any).
- Install the external display screen and power cable, and the screen and cable need to be fixed (if any).



Steps to install the battery meter:

- ① Install the battery meter in a suitable position on the dashboard area.
- ② Connect one end of the RS485 cable to the RS485 connector on the battery, and then connect the other end to the battery meter.

4. Charger

◀ Note

- This battery must be charged with the appropriate lithium battery charger.
- After being fully charged, the battery voltage difference will increase and needs to be left alone for 30 minutes before returning to normal.

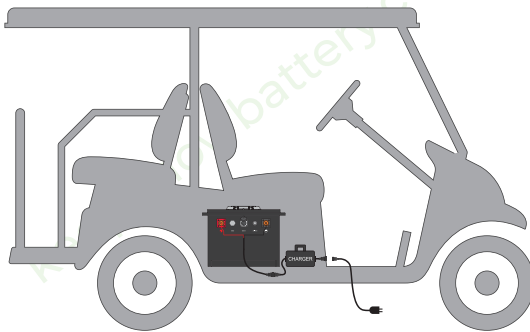
◀ Warning

- Using the incorrect charger may cause insufficient charging or battery damage.
Doing so will cause problems and is not covered under warranty.
Do not connect DC output cables to battery with reverse polarity.
Doing so will cause irreversible damage and is not covered under warranty.

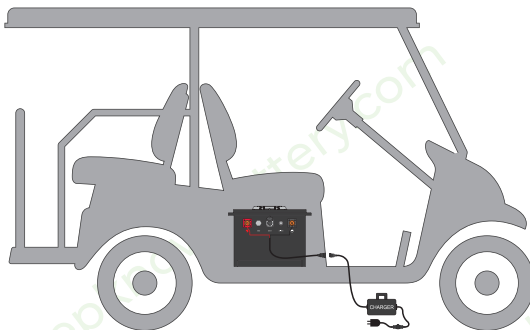


Please install the charger according to the actual specifications.

The following are 2 installation methods we recommend.



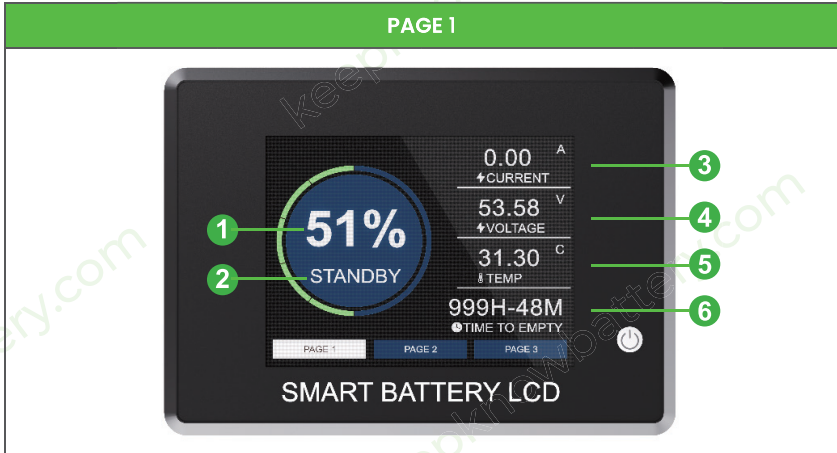
Option 1 (Built in Charger)



Option 2 (External Charger)

5. LCD Display

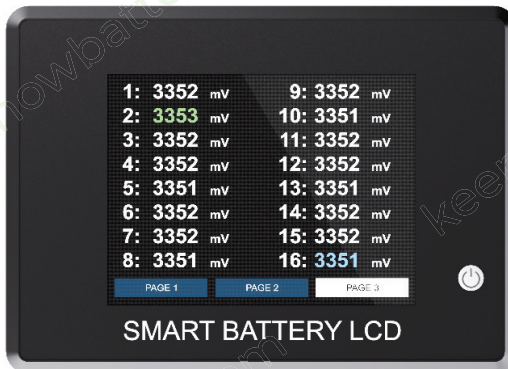
The battery comes with a touch screen.
You can view battery information in real time on the LCD.



1	51%	Capacity / SOC	4	53.58V	Total Voltage
2	STANDBY	Battery System Status	5	31.30°C	Temperautre
3	0.00A	harge / Discharge Current	6	999H-48M	Charging Full / Discharge Empty Time



1	DSG	Discharge Soft Switch	5	CHG	Charge Soft Switch
2	105AH	Real-Time Capacity	6	0000	Battery Cycle Index Counter
3	31.2°C	Max. Temperature	7	30.6°C	Min. Temperature
4	0000	BMS Protection Code	8	NOMAL	Protection State



Voltage Of Each Cell

6. Warning

- High Voltage. DO NOT install or service this battery unless you are properly trained.
- Use only with components that have the same voltage and current rating as the battery.
- If the battery is damaged, contact the place you purchased it
- DO NOT touch or connect to the terminals unless the battery is manually turned off.
- DO NOT open or attempt to service the battery, there are no user serviceable parts inside.
- DO NOT expose cable outside.
- DO NOT connect batteries in series.
- DO NOT connect the battery with AC power directly.
- DO NOT connect the battery with different type of battery.
- DO NOT short-circuit the battery, use it near heat or water sources, or allow it to become wet.
- DO NOT insert nails or other objects into the battery, strike it, or weld directly on the battery.
- DO NOT operate the battery with damaged cables or charging adapters.
- DO NOT operate this product in explosive atmospheres (i.e. flammable liquids, gases, or dust) or set the unit on flammable materials (i.e. carpeting, upholstery, paper, cardboard).
- DO NOT permit the battery to freeze. Never charge a frozen battery.
- DO NOT pressure wash, submerge, or use chemical agents to clean your battery.
- DO NOT keep using this product if it is damaged, waterlogged, distorted, or broke.
- In case of skin or eye contact, rinse immediately with clean water and seek medical attention.
- This product contains lithium ion batteries. When it is worn out dispose it properly using local laws and regulations.
- Any warranty claims are excluded for direct or indirect damagedue to items above.

7. Storage

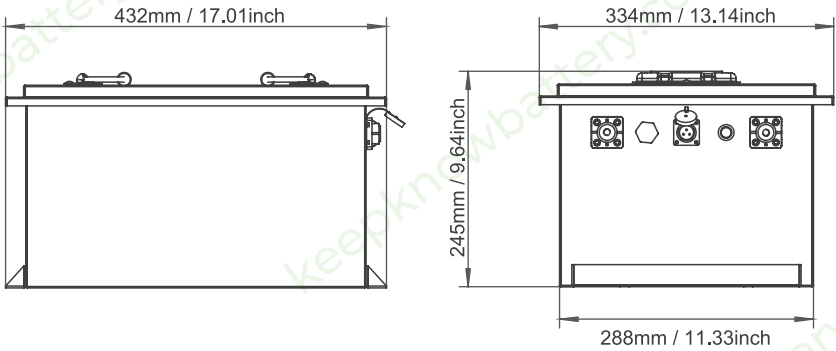
- The battery should be stored in a dry and ventilated room, away from fire or water, and the storage temperature is 10-45°C (50-113°F).
- For long term storage, recommended to charge the battery to 30%-50%, unplug the charger and turn off the power button.
The battery must be charged at least once every 3 months. Failure to charge for 6 months may permanently damage the lithium cells, and is not covered under warranty.
- After long term storage, it is advised to fully charge the battery before use, regardless of SOC displayed.
During long term storage, the calibrated SOC may drift, and must be fully charged to re-calibrate.

8. Recommended Usage

- Please read the battery instructions and the label on its surface before use.
- When in use, the battery shall be kept out of heat, high voltage and avoided children's touching. Do not drop the battery.
- Use the compatible charger. Do not put the battery into the charger over 24hours.
- Do not touch contacts together. Do not demolish or assembly the battery by yourself. Do not put the battery in the damp place to avoid danger.
- Do not wrap it with conduct material to avoid the damage caused by the direct contact between the metal and battery. Keep the battery in dry places.
- Well disposed the disused battery. Do not put it into fire or water.

9. Technical Specifications

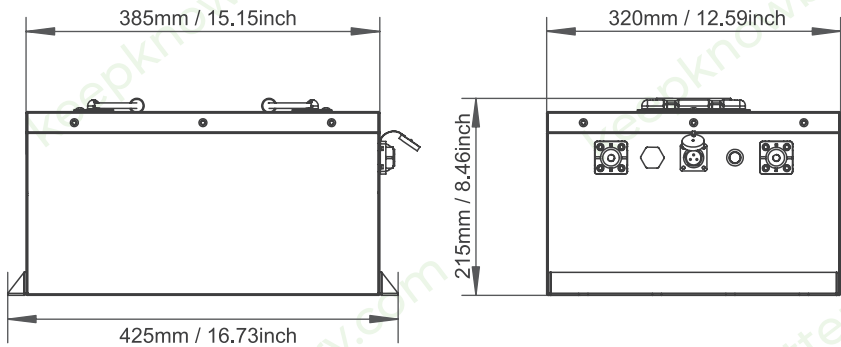
Datasheet	Parameter
Nominal Voltage	38.4V
Nominal Capacity	105Ah
Communication Mode	RS485
Cycle Life	>6000 Cycles (80%DOD), at 25°C
Charge Voltage	43.8V
Continuous Charge Current	100A
Discharge Cut-off Voltage	30V
Max. Continuous Discharge Current	200A
Peak Discharging Current	400A 30s
Dimensions	432*334*245 mm / 17.01*13.14*9.64 inch



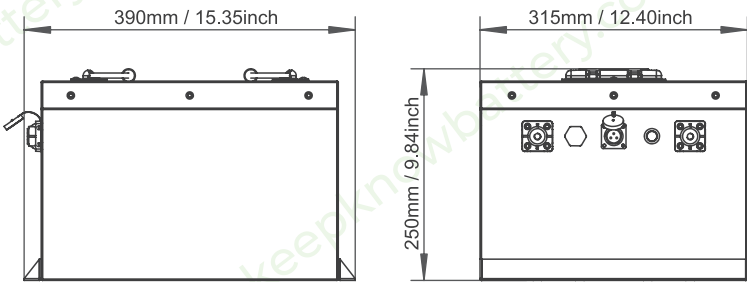
Datasheet

Parameter

Nominal Voltage	51.2V
Nominal Capacity	72Ah
Communication Mode	RS485
Cycle Life	>6000 Cycles (80%DOD),at 25°C
Charge Voltage	58.4V
Continuous Charge Current	72A
Discharge Cut-off Voltage	40V
Max. Continuous Discharge Current	150A
Peak Discharging Current	300A 30s
Dimensions	385*320*215 mm / 15.15*12.59*8.46 inch



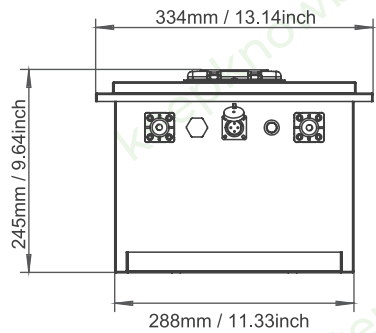
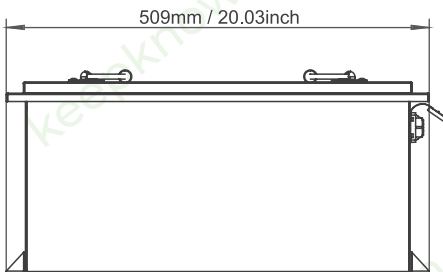
Datasheet	Parameter
Nominal Voltage	51.2V
Nominal Capacity	105Ah
Communication Mode	RS485
Cycle Life	>6000 Cycles (80%DOD),at 25°C
Charge Voltage	58.4V
Continuous Charge Current	100A
Discharge Cut-off Voltage	40V
Max. Continuous Discharge Current	200A
Peak Discharging Current	400A 30s
Dimensions	390*315*250 mm / 15.35*12.40*9.84 inch



Datasheet

Parameter

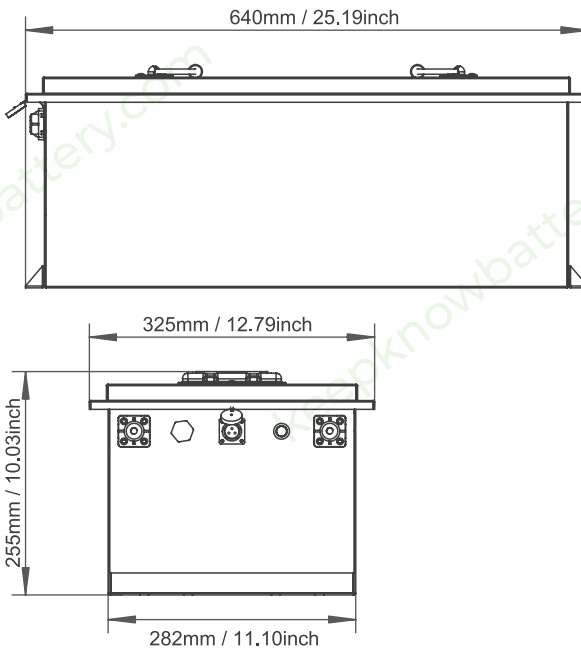
Nominal Voltage	51.2V
Nominal Capacity	105Ah
Communication Mode	RS485
Cycle Life	>6000 Cycles (80%DOD), at 25°C
Charge Voltage	58.4V
Continuous Charge Current	100A
Discharge Cut-off Voltage	40V
Max. Continuous Discharge Current	200A
Peak Discharging Current	400A 30s
Dimensions	509*334*245 mm / 20.03*13.14*9.64 inch



Datasheet

Parameter

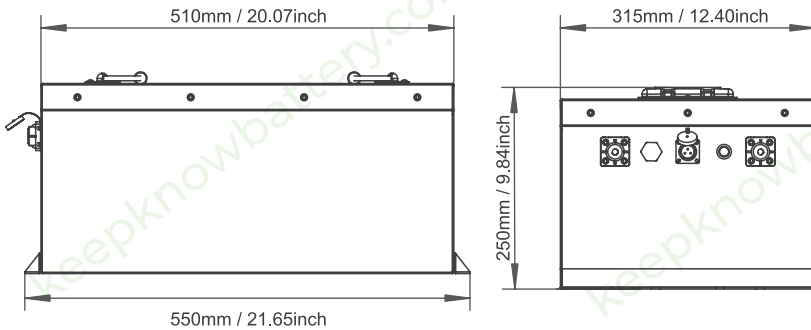
Nominal Voltage	51.2V
Nominal Capacity	150Ah
Communication Mode	RS485
Cycle Life	>6000 Cycles (80%DOD),at 25°C
Charge Voltage	58.4V
Continuous Charge Current	100A
Discharge Cut-off Voltage	40V
Max. Continuous Discharge Current	200A
Peak Discharging Current	400A 30s
Dimensions	640*325*255 mm / 25.19*12.79*10.03 inch



Datasheet



Parameter

Nominal Voltage	73.6V
Nominal Capacity	105Ah
Communication Mode	RS485
Cycle Life	>6000 Cycles (80%DOD),at 25°C
Charge Voltage	83.95V
Continuous Charge Current	100A
Discharge Cut-off Voltage	57.5V
Max. Continuous Discharge Current	200A
Peak Discharging Current	400A 30s
Dimensions	510*315*250 mm / 20.07*12.40*9.84 inch



KEEP'KNOW

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