

Five-stage IC controlled Greensaver charger

Dear Customer,

We sincerely thank you for your choosing our Greensaver charger, which is specially designed for Greensaver battery and is equipped with single chip microcomputer. And we trust that with its five-stage feature along with its outstanding performance it will satisfactorily fulfill the requirement of your charging purpose.

1. Specifications

Model: HB48062

Input voltage: AC90V ~ AC264V 47~63Hz

Input Power: 420W MAX

Output voltage: DC59.5V \pm 0.5V

Output current: 6A \pm 0.3A

Battery pack voltage: 48V

Temperature applicable: -20°C ~ + 40°C

Charge time: depends on the capacity of the battery

Trickle Charge time : set to be one hour and will stop automatically

2. Features:

- 2-1 It enables a full and complete charge for a new battery and to keep the longest lifespan for an used battery.
- 2-2 According to the battery's state of charge, the five stage of charging pattern will be adjusted to it automatically to fully charge the battery.

3. Multi-function for Protection

With Greensaver charger's multi-functional features for protection that ensures the safety by charging and the protection for the battery and the charger.

3-1 Defect battery inspection:

The designed program inside the IC will check the battery and will stop charging automatically if the battery is defect, a red power signal will be glittering.

3-2 Reverse polarity protection:

The charger will not charge the battery, when reverse polarity is detected, and an alarm signal will be activated.

3-3 Overload protection:

It charges the battery with the constant current and voltage to avoid overcharging.

3-4 Short circuit protection:

The charger will stop charging automatically when short circuit occurs in it.

3-5 Overheating protection:

※Special charging techniques to protect the battery from overheating.

※The fan will be activated automatically once the charging procedure having been initiated to keep the temperature in normal and prolong the life time of the charge.

※The charger will stop charging automatically when overheating occurs, and will start charging again when the temperature recovers in normal that ensures the safety of the battery, charger and the users.

3.6 The whole charging time is controlled by IC chip, and the charging will be automatically stop one hour after trickle charge stage.

3.7 Thunder stroke protection:

A thunder stroke protection device inside the charger is to prevent explosion of the charger and to protect the battery from the high voltage electricity caused by thunder.

4. Instructions

- 4-1. Connect the DC output plug onto the battery container and then the AC input plug onto the main.

- 4-2. First, the red power signal of the charger will turn on. The charging signal will glitter red and green for 3 times during self-check of the IC chip.

- 4-3. After the charging signal having glittered red and green for 3 times,

- 1) When the red signal is on, means that it starts to charge the battery.

- 2) if no signal is shown, means that the battery container is not well plugged. Please unplug both DC and AC connectors, wait for 30 seconds, and then re-start the procedure from 4-1.

- 4-4. The charging signals are shown 5 segments according to the degree of saturation. When the batteries have reached 90% degree of saturation, the charging signal will turn to yellow, means that it starts the equalization charging.

- 4-5. When the charging signal turns from yellow to green, means that it is in a step of trickle charge and the battery has been already fully charged so far. Leave it at the status of trickle charge to allow the battery to reach the best saturation. one hour later, the charger will automatically stop.

- 4-6. After finishing charging the battery please unplug the AC plug from the main first and then the DC plug on the battery container.

5. Notice:

- 5.1. Disassemble of the charger by the user is not recommended owing to high voltage inside the charger.

- 5.2. Do not plug the charger when the fingers are wet and do not use the charger at a moisture place.

- 5.3. Keep the charger away from flammable and explosive gas while using the charger.

- 5.4. keep the charger away from a dusty or vibrating place .

- 5.5. Do not cover the fans with other stuffs to keep the charger well ventilated.

- 5.6. The operation temperature shall be limited from -20°C to + 40°C.