

Smart Lithium Battery Charger (20A) for 74.0V Li-Ion pack

Instruction

Warning: for safe operation and proper using the charger, please read this instruction carefully before charging. Any wrong operation may destroy the charger or even injure person.

Introduction:

This Lithium battery charger has high frequency switch mode and intellectualized with microchip. It represents the state-of the art of today's technology for battery charging.

This charger has improved efficiency, good reliability, and general protect function. It also has smaller size, low weight and small ripple, precise charging current. In additional, This chargers saves on energy sources and looks speciously, and there are led on the panel. The portable grip and build in hole convenient for using.

Main function and excellence

1. **Two steps charging mode:** Bulk-Absorption, two steps intellectualized charging. Automatic follow the battery charging curve change.
2. **Many led indication function:** Three states LED, Red LED-failure, orange LED-80%, green LED- charged, Five red led show the charging current.
3. **Automatic cycling charging function:** adapt the equipment of cycling used. When the battery and the charger are not separated, the chargers can automatic work again.
4. **Prevent Wireless electromagnetism interference:** the charger has a good filtering circuit to decrease the output ripple, preventing disturbs or destroys the radio, TV set and computer or other equipment.
5. **Overheating Protection:** the charger can automatically shut when the temperature is too high, then it can automatically resume work when the temperature is natural.
6. **Short circuit protection function:** this function will work when the user make the output short circuit careless, avoid destroy the charger.
7. **Reverse polarity protection:** this function can alarm the user when the batter is

reversed.

8. **Destroy arc function:** there is not electric arc when connect the battery and the charger, avoid burn the socket.

9. **Automatic shut function:** The charger will automatic timing the time in Bulk step. And the charger will turn off after full charging for 8-10 hours. Save on energy sources if the user forgets turn off the charger.

Parameter:

| | |
|-----------------------------|---------------|
| Rating input voltage | 110 VAC±10% |
| frequency | 40~64HZ |
| Rating input current | 22~23A |
| Rating output voltage | 86.4±0.2 VDC |
| Max surge current | 30A |
| Rating charging current | 20±0.2 A |
| Voltage adjusting rate | ≤±1% |
| Current adjusting rate | ≤±2% |
| Max delivered power | 1700W |
| Ripple | ≤200mV |
| Efficacious | ≥85% |
| Work Conditions | -10°C~+45°C |
| Storage Conditions | -40°C~+85°C |
| Relative Humidity: | ≤90% , NO dew |
| Over Current Protection | (yes) |
| Over Voltage Protection | (yes) |
| Short Circuit Protection | (yes) |
| Reverse Polarity Protection | (yes) |

Save this instructions-this manual contains important safety and operating instructions for the battery charger.

Safety instructions and warning:

1. Always provide good ventilation when charging, do this can ensure the charger work a long time.
2. As a result of there is a big current, please use the cable of Batteryspace.com commends. It will heat if check a cable not accord with the requirement, even burn the cable.
3. Do not operate charger with a damage cord or plug, return the charger to the place where purchased.
4. Never use the charger if it has received a sharp below, been dropped or otherwise damaged in any way; take it to a qualified service man.
5. To reduce risk of damage to plug and cord, pull by the plug rather than by the cord when disconnecting charger. Otherwise may result the cable destroyed or serious injury to persons.

6. **WARNING:** This charger only to charge the Lithium battery, please affirm the kind and voltage range of your battery, etc. if use it charge for dry-cell battery, lead-acid battery and nickel- cadmium battery, may cause injury to person and damage to property.
7. Don't put the battery and the charger on each other.
8. Never charge a frozen battery. The charging temperature of the battery according to the manual of the battery manufacture.

Warning: The charge will heat in when charging, so not only keep the around of the charger ventilate, but also don't put the charger on the wood floor or flammability thing, such as carpet, paper and other upholstery. Don't cover the charger.

Warning: The Discover is not fit to work in the damp and boat. Don't expose it in the rain, snow. Don't dip in the water or pour the water to it. If get wet the charger for careless, must dry it before use. If use the charger on the boat for sure, must keep it dry.

Warning: Do not use the charger in high temperature (higher than 50°C), near the burner, and directly in the sun.

Warning: High voltage in the charger. Don't disassemble the charger, take it to a qualified serviceman, Incorrect reassembly may result in a risk

Warning: had batter don't use the charger before read this instruction. Don't let the children and the people who can't operation the charger use the charger, even touch it. If or not, it can result in a risk.

Direction for charge:

1. For the charger work reliable for a long time, Please use the charger in -10~+40°C and the humidity is little than 70%. It's batter use it in the place that no duty、flammability gas、easy explode gas or causticity gas and it must ventilation.
2. Prepare the necessary tools before charge, and check the input and output cable is or not good, confirm the diameter of the output cable is or not the company recommendatory.
3. When first use the charger, must check the input voltage is 100VAC or 220VAC if accord with the make in the input terminal, don't use the charger if the voltage is not accord, if or not can destroy the charger.
4. Ensure the battery spec match to the charger. Don't use the high voltage charger charge for the low voltage battery. Don't use the low voltage charger charge for the high voltage battery.
5. Remove everything affect ventilate charger after connect the charger and the battery.
6. Remove the excrescent wire and the metal items; prevent producing a short circuit current.
7. The user will remove the battery from the charger after finish charging, and disconnect the charger from the AC power supply. Store the charger well. In additional, the charger

have continuous cycling charging function, if the user want to do this, don't shut the charger and the AC power supply after finish charging. If the battery power supply to others, the charger will track automatic the voltage of the battery, then it will start automatic again when the voltage of the battery is 20 V.

8. Clean battery terminals. If don't use the charger for a long time, pack well and store it in the room, for fear the dusty and damp.

Warranty: The charger will take one and a half years free service from the date of purchase, but against defect factitiously or material. And it can take a repaying service for all life.

Against free service:

1. Defect workman or material.
2. Disassemble or service by factitiously.
3. The charger is wetted or sharp blown by factitiously.

Serious announce: if the user do not operate the charger accord the instruction, the company (AA Portable Power Corp) will not afford any law duty of the possession loss & injury of the person.

The company (AA Portable Power Corp) has the right of explanation and perfect for the instruction.