

CHARGER SERIES OPERATION INSTRUCTION

CE RoHS

Advocate green new energy



USER
MANUAL

◆ Battery Charger Manual

Please keep the charger in the dr, clean, ventilate environment.

Working temprature : -10°C-40°C

Storage Temprature : -40°C-70°C

Relative humidity : 0%-95% non-equilibrium condensation

1.1 Operation Guide

1. Connect the charger positive terminal(+) with battery positive electrode (+), and the negative terminal (-) with battery negative electrode (-).

2. Plug in the power supply to AC the socket.

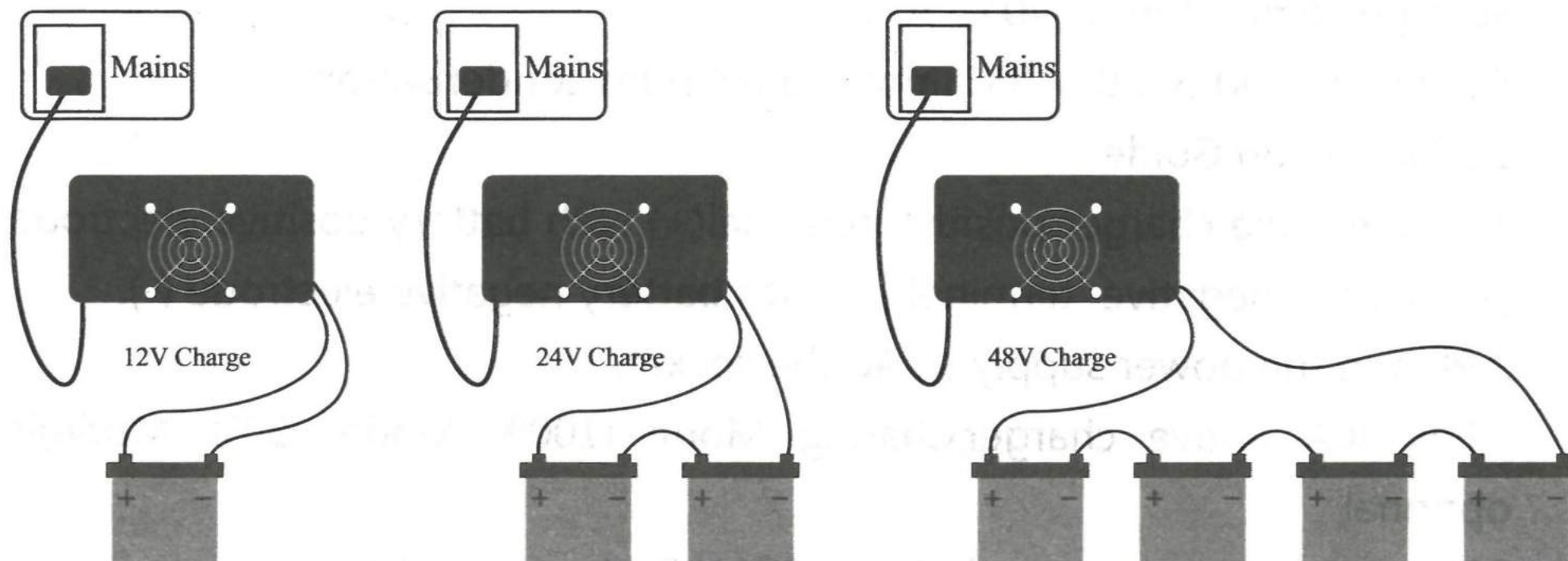
3. For 30A above charger, Charing Mode (100% Mode /50% Mode) is optional,

100% Mode is recommended for 100AH Battery and above ,

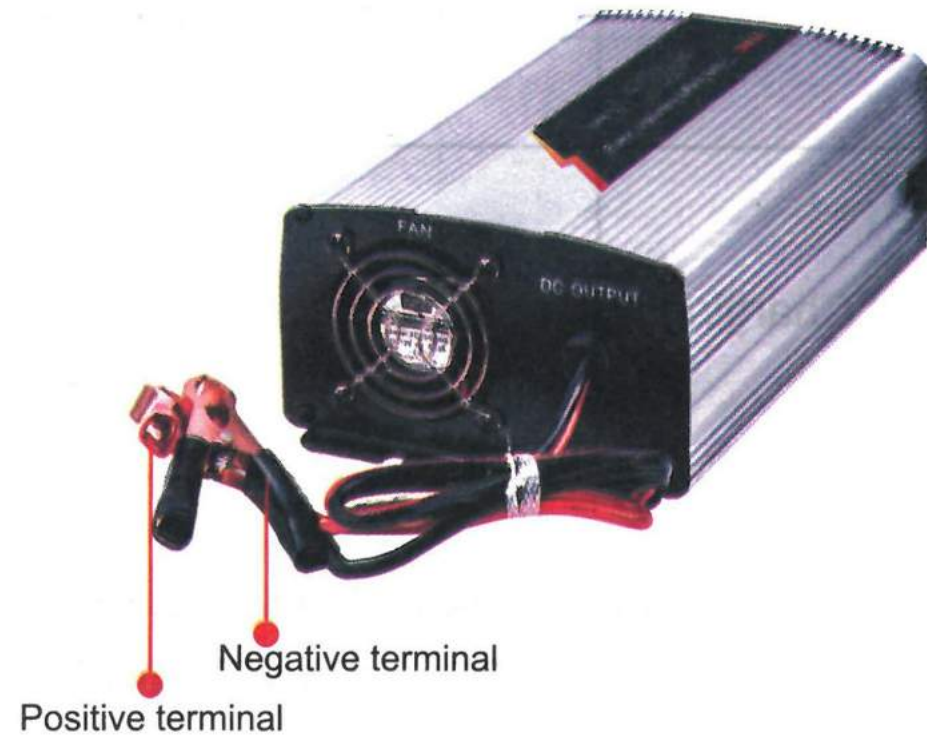
50% Mode is recommened for 50AH Battery and below.

4. Switch on the device, the LED incator turns green.

◆ Connection Diagram



◆ Charger indicator



◆ Troubleshooting Guide

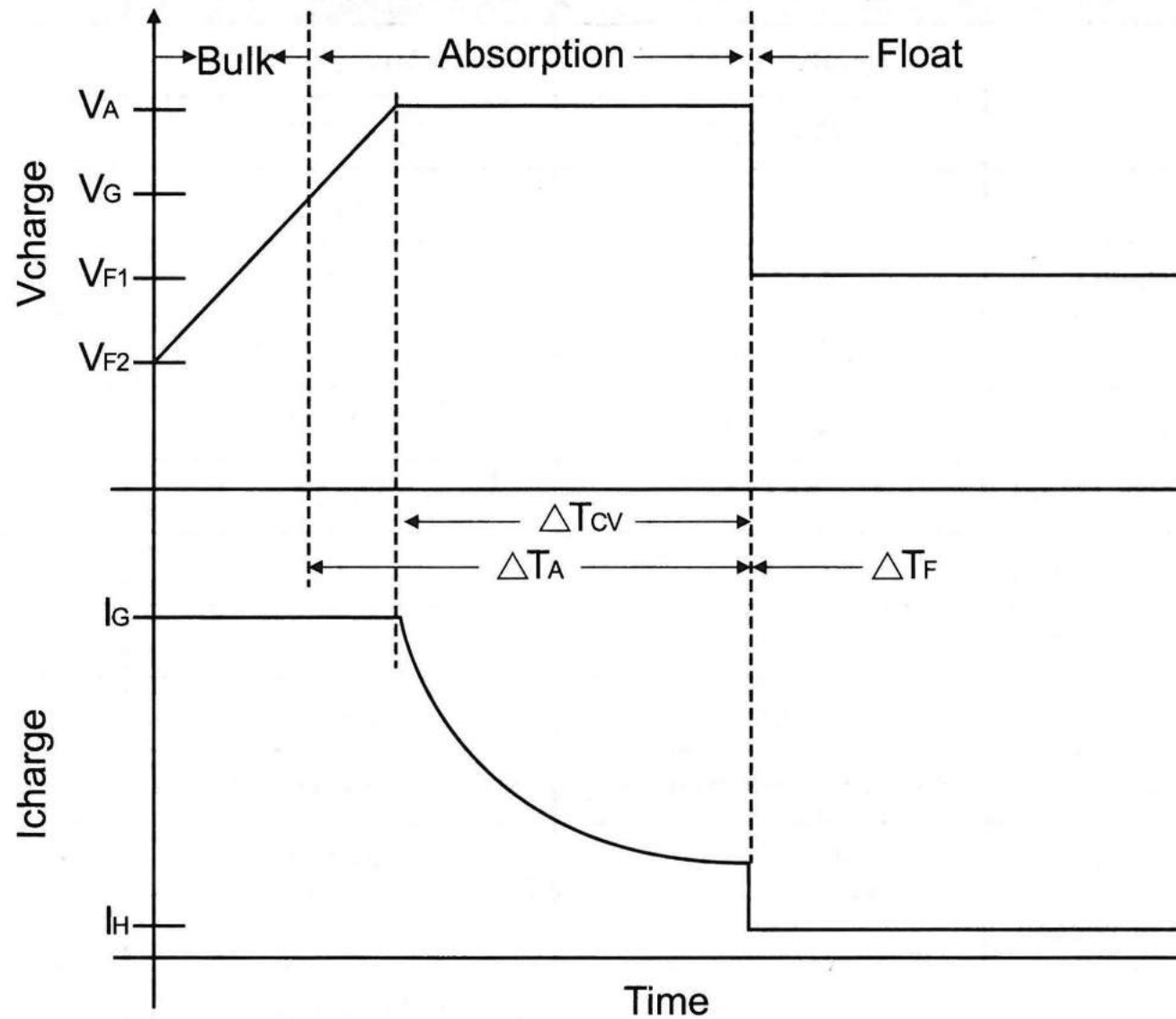
Typical Problem	Possible Reasons	Solutions Suggested
No response	1.No AC Input 2.Disconnected with battery	1.Check the AC plug and if there is electricity. 2.If the connection is correct or the connected terminal is loose.
Not Charging	Battery problems	Check battery is in a good condition. if the battery doesn't work for long it may not be charged.

Note:

For other faults, please contact us for technical support.

Please do not dismantle the charger for maintenance to avoid electric shock .

◆ Charging Mode



◆ 110V Technical Parameters of Battery Charger

Battery Charger Model	AC: 110V-12V10A	AC: 110V-24V10A	AC: 110V-48V10A
Input Voltage	110Vac±15%	110Vac±15%	110Vac±15%
Input Frequency	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz
Output Voltage	12V	24V	48V
Max.Output Voltage	14.5V±0.5V	29V±0.5V	58V±0.5V
Floating Voltage	13.7V±0.5V	27.5V±0.5V	55V±0.5V
Constant Charging(100% Mode)	10A±2A	10A±2A	10A±2A (≥100AH)
Floating Charging(100% Mode)	2A±1A	2A±1A	3A±0.5A
Constant Charging(50% Mode)	/	/	5A±2A(≤50AH)
Floating Charging(50% Mode)	/	/	1.5A±0.5A
Conversion efficiency	≥83%	≥83%	≥83%
Charging Indication	Red light on when charging	Red light on when charging	Indicator turns red,keep flashing every seconds.
fully charged Indication	Green light on	Green light on	Indicator turns green from red
Reverse connection protection	YES	YES	YES
Fan operation mode	Fan start to work above 40°C	Fan start to work above 40°C	Fan start to work above 40°C

◆ 110V Technical Parameters of Battery Charger

Battery Charger Model	AC: 110V-12V15A	AC: 110V-24V15A	AC: 110V-48V15A
Input Voltage	110Vac±15%	110Vac±15%	110Vac±15%
Input Frequency	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz
Output Voltage	12V	24V	48V
Max.Output Voltage	14.5V±0.5V	29V±0.5V	58V±0.5V
Floating Voltage	13.7V±0.5V	27.5V±0.5V	55V±0.5V
Constant Charging(100% Mode)	15A±2A	15A±2A (≥100AH)	15A±2A (≥100AH)
Floating Charging(100% Mode)	3A±1A	5A±1A	4A±0.5A
Constant Charging(50% Mode)	/	7A±2A(≤50AH)	7.5A±2A(≤50AH)
Floating Charging(50% Mode)	/	2A±1A	2A±0.5A
Conversion efficiency	≥83%	≥83%	≥83%
Charging Indication	Red light on when charging	Indicator turns red,keep flashing every seconds.	Indicator turns red,keep flashing every seconds.
fully charged Indication	Green light on	Indicator turns green from red	Indicator turns green from red
Reverse connection protection	YES	YES	YES
Fan operation mode	Fan start to work above 40°C	Fan start to work above 40°C	Fan start to work above 40°C

◆ 110V Technical Parameters of Battery Charger

Battery Charger Model	AC: 110V-48V12A	AC: 110V-12V20A	AC: 110V-24V20A
Input Voltage	110Vac±15%	110Vac±15%	
Input Frequency	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz
Output Voltage	48V	12V	24V
Max.Output Voltage	58V±0.5V	14.5V±0.5V	29V±0.5V
Floating Voltage	55V±0.5V	13.7V±0.5V	27.5V±0.5V
Constant Charging(100% Mode)	12A±2A (≥100AH)	20A±2A	20A±2A (≥100AH)
Floating Charging(100% Mode)	3A±0.5A	5A±1A	6A±1A
Constant Charging(50% Mode)	6A±1A(≤50AH)	/	10A±2A(≤50AH)
Floating Charging(50% Mode)	2A±0.5A	/	3A±1A
Conversion efficiency	≥83%	≥83%	≥83%
Charging Indication	Indicator turns red,keep flashing every seconds.	Red light on when charging	Indicator turns red,keep flashing every seconds.
fully charged Indication	Indicator turns green from red	Green light on	Indicator turns green from red
Reverse connection protection	YES	YES	YES
Fan operation mode	Fan start to work above 40℃	Fan start to work above 40℃	Fan start to work above 40℃

◆ 110V Technical Parameters of Battery Charger

Battery Charger Model	AC: 110V-24V25A	AC: 110V-12V30A	AC: 110V-24V30A
Input Voltage	110Vac±15%	110Vac±15%	110Vac±15%
Input Frequency	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz
Output Voltage	24V	12V	24V
Max.Output Voltage	29V±0.5V	14.5V±0.5V	29V±0.5V
Floating Voltage	27.5V±0.5V	13.7V±0.5V	27.5V±0.5V
Constant Charging(100% Mode)	25A±2A (≥100AH)	30A±2A (≥150AH)	30A±2A (≥100AH)
Floating Charging(100% Mode)	8A±1A	7A±2A	8A±1A
Constant Charging(50% Mode)	12.5A±2A(≤50AH)	15A±2A(≤100AH)	15A±2A(≤50AH)
Floating Charging(50% Mode)	3A±1A	3A±2A	4A±1A
Conversion efficiency	≥83%	≥83%	≥83%
Charging Indication	Indicator turns red,keep flashing every seconds.	Indicator turns red,keep flashing every seconds.	Indicator turns red,keep flashing every seconds.
fully charged Indication	Indicator turns green from red	Indicator turns green from red	Indicator turns green from red
Reverse connection protection	YES	YES	YES
Fan operation mode	Fan start to work above 40°C	Fan start to work above 40°C	Fan start to work above 40°C

◆ 110V Technical Parameters of Battery Charger

Battery Charger Model	AC: 110V-12V40A	AC: 110V-12V50A	AC: 110V-12V60A
Input Voltage	110Vac±15%	110Vac±15%	110Vac±15%
Input Frequency	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz
Output Voltage	12V	12V	12V
Max.Output Voltage	14.5V±0.5V	14.5V±0.5V	14.5V±0.5V
Floating Voltage	13.7V±0.5V	13.7V±0.5V	13.7V±0.5V
Constant Charging(100% Mode)	40A±2A (≥100AH)	50A±2A (≥150AH)	60A±3A (≥150AH)
Floating Charging(100% Mode)	12A±1A	15A±2A	20A±2A
Constant Charging(50% Mode)	20A±2A(≤50AH)	25A±2A(≤100AH)	30A±3A(≤100AH)
Floating Charging(50% Mode)	6A±1A	7.5A±2A	7.5A±2A
Conversion efficiency	≥83%	≥83%	≥83%
Charging Indication	Indicator turns red,keep flashing every seconds.	Indicator turns red,keep flashing every seconds.	Indicator turns red,keep flashing every seconds.
fully charged Indication	Indicator turns green from red	Indicator turns green from red	Indicator turns green from red
Reverse connection protection	YES	YES	YES
Fan operation mode	Fan start to work above 40℃	Fan start to work above 40℃	Fan start to work above 40℃

◆ 220V Technical Parameters of Battery Charger

Battery Charger Model	AC: 220V-12V10A	AC: 220V-24V10A	AC: 220V-48V10A
Input Voltage	220Vac±15%	220Vac±15%	220Vac±15%
Input Frequency	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz
Output Voltage	12V	24V	48V
Max.Output Voltage	14.5V±0.5V	29V±0.5V	58V±0.5V
Floating Voltage	13.7V±0.5V	27.5V±0.5V	55V±0.5V
Constant Charging(100% Mode)	10A±2A	10A±2A	10A±2A (≥100AH)
Floating Charging(100% Mode)	2A±1A	2A±1A	5A±2A(≤50AH)
Constant Charging(50% Mode)	/	/	3A±0.5A
Floating Charging(50% Mode)	/	/	1.5A±0.5A
Conversion efficiency	≥83%	≥83%	≥83%
Charging Indication	Red light on when charging	Red light on when charging	Indicator turns red,keep flashing every seconds.
fully charged Indication	Green light on	Green light on	Indicator turns green from red
Reverse connection protection	YES	YES	YES
Fan operation mode	Fan start to work above 40°C	Fan start to work above 40°C	Fan start to work above 40°C

◆ 220V Technical Parameters of Battery Charger

Battery Charger Model	AC: 220V-12V10A	AC: 220V-24V10A	AC: 220V-48V10A
Input Voltage	220Vac±15%	220Vac±15%	220Vac±15%
Input Frequency	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz
Output Voltage	12V	24V	48V
Max.Output Voltage	14.5V±0.5V	29V±0.5V	58V±0.5V
Floating Voltage	13.7V±0.5V	27.5V±0.5V	55V±0.5V
Constant Charging(100% Mode)	10A±2A	10A±2A	10A±2A (≥100AH)
Floating Charging(100% Mode)	2A±1A	2A±1A	5A±2A(≤50AH)
Constant Charging(50% Mode)	/	/	3A±0.5A
Floating Charging(50% Mode)	/	/	1.5A±0.5A
Conversion efficiency	≥83%	≥83%	≥83%
Charging Indication	Red light on when charging	Red light on when charging	Indicator turns red,keep flashing every seconds.
fully charged Indication	Green light on	Green light on	Indicator turns green from red
Reverse connection protection	YES	YES	YES
Fan operation mode	Fan start to work above 40℃	Fan start to work above 40℃	Fan start to work above 40℃

◆ 220V Technical Parameters of Battery Charger

Battery Charger Model	AC: 220V-12V15A	AC: 220V-24V15A	AC: 220V-48V15A
Input Voltage	220Vac±15%	220Vac±15%	220Vac±15%
Input Frequency	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz
Output Voltage	12V	24V	48V
Max.Output Voltage	14.5V±0.5V	29V±0.5V	58V±0.5V
Floating Voltage	13.7V±0.5V	27.5V±0.5V	55V±0.5V
Constant Charging(100% Mode)	15A±2A	15A±2A (≥100AH)	15A±2A (≥100AH)
Floating Charging(100% Mode)	3A±1A	8A±2A(≤50AH)	7.5A±2A(≤50AH)
Constant Charging(50% Mode)	/	5A±1A	4A±0.5A
Floating Charging(50% Mode)	/	2.5A±1A	2A±0.5A
Conversion efficiency	≥83%	≥83%	≥83%
Charging Indication	Red light on when charging	Indicator turns red,keep flashing every seconds.	Indicator turns red,keep flashing every seconds.
fully charged Indication	Green light on	Indicator turns green from red	Indicator turns green from red
Reverse connection protection	YES	YES	YES
Fan operation mode	Fan start to work above 40℃	Fan start to work above 40℃	Fan start to work above 40℃

◆ 220V Technical Parameters of Battery Charger

Battery Charger Model	AC: 220V-12V20A	AC: 220V-24V20A	AC: 220V-24V25A
Input Voltage	220Vac±15%	220Vac±15%	220Vac±15%
Input Frequency	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz
Output Voltage	12V	24V	24V
Max.Output Voltage	14.5V±0.5V	29V±0.5V	29V±0.5V
Floating Voltage	13.7V±0.5V	27.5V±0.5V	27.5V±0.5V
Constant Charging(100% Mode)	20A±2A	20A±2A (≥100AH)	30A±2A (≥100AH)
Floating Charging(100% Mode)	5A±1A	10A±2A(≤50AH)	15A±2A(≤50AH)
Constant Charging(50% Mode)	/	6A±1A	8A±1A
Floating Charging(50% Mode)	/	3A±1A	4A±1A
Conversion efficiency	≥83%	≥83%	≥83%
Charging Indication	Red light on when charging	Indicator turns red,keep flashing every seconds.	Indicator turns red,keep flashing every seconds.
fully charged Indication	Green light on	Indicator turns green from red	Indicator turns green from red
Reverse connection protection	YES	YES	YES
Fan operation mode	Fan start to work above 40℃	Fan start to work above 40℃	Fan start to work above 40℃

◆ 220V Technical Parameters of Battery Charger

Battery Charger Model	AC: 220V-12V30A	AC: 220V-24V30A	AC: 220V-12V40A
Input Voltage	220Vac±15%	220Vac±15%	220Vac±15%
Input Frequency	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz
Output Voltage	12V	24V	12V
Max.Output Voltage	14.5V±0.5V	29V±0.5V	14.5V±0.5V
Floating Voltage	13.7V±0.5V	27.5V±0.5V	13.7V±0.5V
Constant Charging(100% Mode)	30A±2A (≥150AH)	30A±2A (≥100AH)	40A±2A (≥100AH)
Floating Charging(100% Mode)	15A±2A(≤100AH)	15A±2A(≤50AH)	12A±1A
Constant Charging(50% Mode)	7A±2A	8A±1A	20A±2A(≤50AH)
Floating Charging(50% Mode)	4A±2A	4A±1A	6A±1A
Conversion efficiency	≥83%	≥83%	≥83%
Charging Indication	Indicator turns red,keep flashing every seconds.	Indicator turns red,keep flashing every seconds.	Indicator turns red,keep flashing every seconds.
fully charged Indication	Indicator turns green from red	Indicator turns green from red	Indicator turns green from red
Reverse connection protection	YES	YES	YES
Fan operation mode	Fan start to work above 40℃	Fan start to work above 40℃	Fan start to work above 40℃

◆ 220V Technical Parameters of Battery Charger

Battery Charger Model	AC: 220V-12V50A	AC: 220V-12V60A	
Input Voltage	220Vac $\pm$ 15%	220Vac $\pm$ 15%	
Input Frequency	50Hz/60Hz	50Hz/60Hz	
Output Voltage	12V	12V	
Max.Output Voltage	14.5V $\pm$ 0.5V	14.5V $\pm$ 0.5V	
Floating Voltage	13.7V $\pm$ 0.5V	13.7V $\pm$ 0.5V	
Constant Charging(100% Mode)	50A $\pm$ 2A ($\geq$ 150AH)	60A $\pm$ 3A ($\geq$ 150AH)	
Floating Charging(100% Mode)	25A $\pm$ 2A($\leq$ 100AH)	30A $\pm$ 3A($\leq$ 100AH)	
Constant Charging(50% Mode)	15A $\pm$ 2A	20A $\pm$ 2A	
Floating Charging(50% Mode)	7.5A $\pm$ 2A	7.5A $\pm$ 2A	
Conversion efficiency	$\geq$ 83%	$\geq$ 83%	
Charging Indication	Indicator turns red,keep flashing every seconds.	Indicator turns red,keep flashing every seconds.	
fully charged Indication	Indicator turns green from red	Indicator turns green from red	
Reverse connection protection	YES	YES	
Fan operation mode	Fan start to work above 40°C	Fan start to work above 40°C	