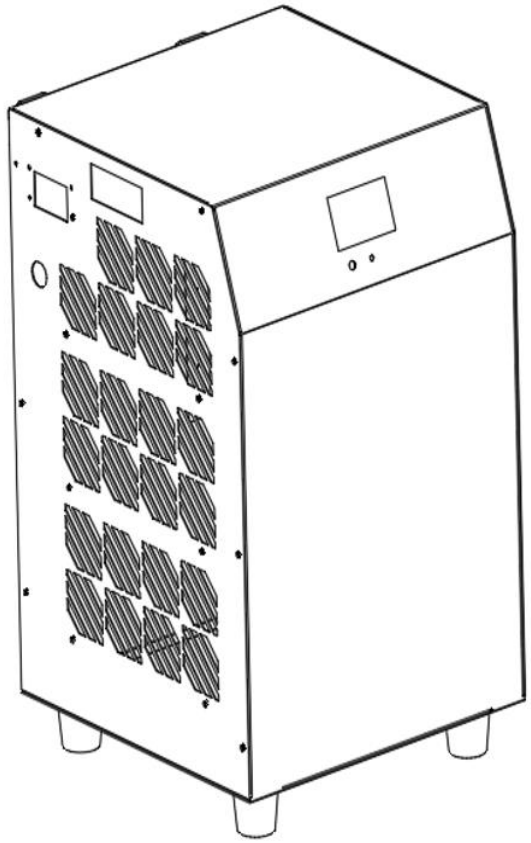
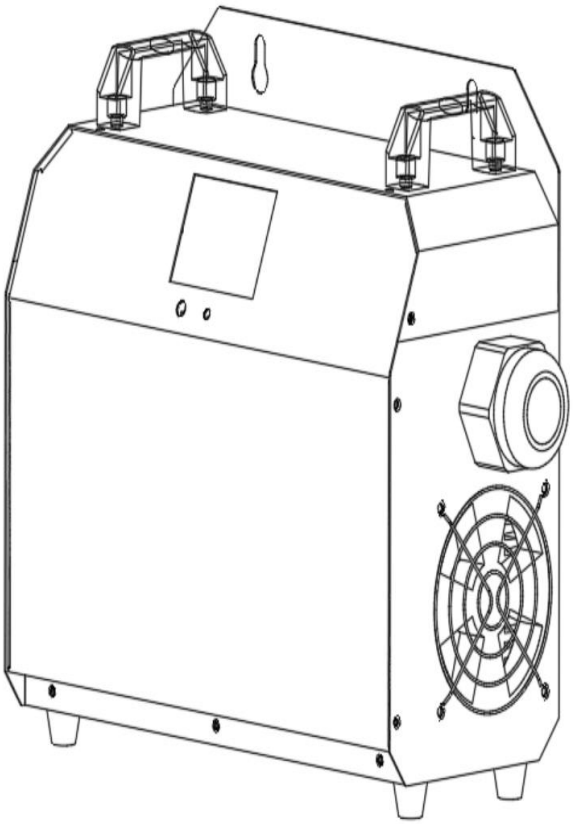
USER MANUAL

WOLONG Lithium Battery Charger





Thanks for choosing our charger !
Please read "User Manual" before you operate the charger.

◆Attention

This Instruction provides information covering installation, parameter, trouble shooting and maintenance.

In order to ensure the correct installation and operation of this charger, please read the instructions carefully before installation, and properly keep the manual for future reference.

◆Special notice

◇ Unauthorized conversion or reproduction of all or any part of this manual is prohibited.

◇ The contents of this manual are subject to change without notice.

◇ If any error or omission is found in the instructions, please contact our distributor.

◇ Please keep the charger serial number and nameplate properly to ensure you can enjoy a better afterservice.

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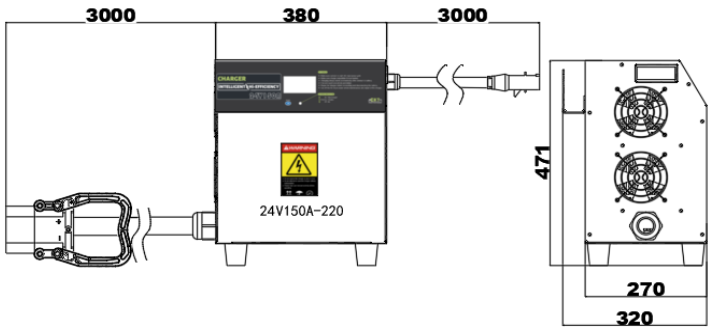
Summary of Products

This series of high frequency chargers is equipped with high conversion efficiency, high precision of voltage stabilization and current stabilization, and low ripple of output current. Owing to the high frequency technology, the charger has the characteristics of saving electricity, easy control, adjustable and wide range, compact size and lightweight.
The charger is mainly composed of rectifier filter circuit, high frequency switiching inverter circuit, PWM control circuit, output rectifier wave circuit, reverse protection, short circuit protection, hardware protection circuit and auxiliary power source circuit.

Dimension, weight and parameters



	Model	48V100V-220
INPUT	AC Voltage	AC100-240V
	AC Phase	Single Phase
	Rated Frequen cy	50/60Hz
	In put Currentt(Max)	<=29A
	Power factor	≥ 0.99
	Input power	≤ 6.3KW
	AC Plug	Industrial /L+N+PE
OUTPUT	Conversion effcien cy	≥ 0.92
	Rated output voltage	57.6V
	Rated output current	100A
	Rated output power	5.76KW
	DC output voltage	10Vdc~60Vdc
	Output plug	Rema160A,Male or Female plug, optional
COMM	CAN-BUS	Y
	P rotocol	Customized
OTHER	Battery Type	Lead-Acid /Lithium
	Dim ension	380X320X471(mm)
	Weight	26KG
	Cooling mode	Air cooling
	Ambient Temperature	-20:C~50C
	Working humidity	0%~ 95%
	IP Rating	IP20
	IP Rating (Optional)	IP54
	Noise	<65dB

	Aititude	<2000m

(For special working condition, please communicate with us before placing the order .)

Operation instructions：

1. Charging preparation

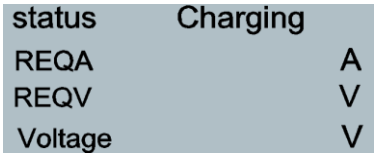
Please check appearance including the charger, cables and plugs.
Please make sure the AC input terminal and DC output terminal are connected in place and that they are not loose.
Make sure the air switch is in the right state.
Power on the charger, self-checking will be initiated automatically.

2. Charging operation steps

1) Make sure the plug and your hands are dry before operation.
2) Turn off the electric boat and the power on the battery.
3) Connect the charge plugs of charger with the battery.
4) Charging always starts automatically after connecting to battery,and the charger indicator is flashing at the same time .
5) If an error occurs during charging, press ‘Pause’ to stop charging until solve it.
6) The charger will automatically stop charging when battery is fully charged. Otherwise the charger indicator is always On.
7) If you want to use the electric boat during the charging, press ‘Pause’ to stop charging before disconnecting the plugs.

3. LCD display description

First screen display

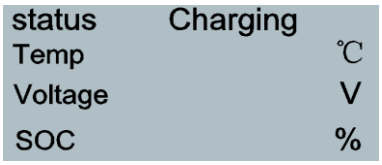


REQA：Charge current set by battery BMS

REQV: Charging voltage set by battery BMS

Voltage：Current battery voltage

Second screen display

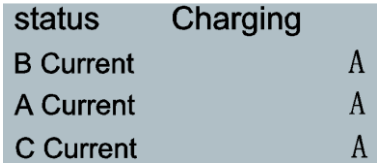


Temp：Cell temperature

Voltage: Cell voltage

SOC ： Battery capacity

Third screen display

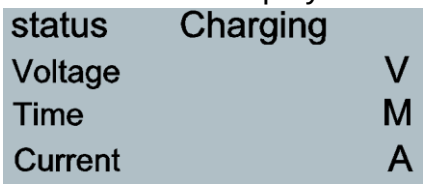


B Current :Output current of charger MODULE B

A Current :Output current of charger MODULE A

C Current : Output current of charger MODULE C

Fourth screen display



Voltage :Current battery voltage

Time :charge time

Current : Charger output current

Installation and Startup

1. Installation external wiring and Air switch minimum requirements for AC input power.

Model	Section area of Input wirings (mm)	Air Switch
48V100A-220	2x6mm2+1 x 6mm2 L+N + PE	32A-2P

2. Installation Environment Requirements

No rain/water, no direct exposure to sun light, far from heat source.
Free of dust, corrosive gases, flammable gases, oily mildew, steam, dripping water, etc.
Indoor is better.
Leave more than 200 mm space around.

Maintenance

In order to increase the service life, please clean the dust of the air inlet every month (adjust direction according to environmental condition), so as to cool down the machine well.

Faults list and troubleshooting

NO.	Faults on display	Description	Troubleshooting
1	Fault UVP 输入欠压	The input voltage is higher than the allowable value.	Stop charging and check if the AC input voltage meets 380V ±10%.
2	Fault IPC 缺相	The AC input three-phase power is missing one phase	Stop charging and check if the AC input three-phase power is correct
3	FAN Fault 风扇故障	The fan is faulty. Check the fan	Stop charging and check 1.Check whether the fan is stuck
4	Output undervoltage protection	Output voltage is below allowable value.	Stop charging and check 1. Right charger for right battery. 2. The output voltage of the charger.
5	Output overcurrent protection	Output current is higher than allowable value	Stop charging, check 1. The output current settings of the charger. 2. Whether the output gun is damaged. 3. If the connection is normal.
6	Fault OTP	The charger temperature is too high.	Stop charging and check Check whether the fan is stuck Check whether the heat dissipation air duct of the charger is shielded
7	Battery disconnection protection	Charger Output Line Not Connected to Battery	Stop charging and check 1. The charging gun is not connected well. 2. The CAN communication line is not connected well.
8	BMS Fault	Interruption of communication between charger and BMS	Stop charging and check whether the CAN communication line is not connected well.
9	Output Short Circuit Protection	Output positive and negative pole short connection	Stop charging and check whether there is short circuit to ground or between positive and negative poles.
10	Battery Back Connection Protection	Positive and negative are reversed.	Stop charging and check the positive and negative poles of the charging gun and the battery.

Note: Please contact us if the above treatments can’t solve the failure.