A. Overview:

This product adopts digital programming technology, with high output voltage/current precision and good stability. The charging process is automatically controlled by the charging program to meet the requirements of temperature resistance and vibration resistance. The battery status will be automatically identified within 30 seconds after the charger is started, and the charging status will be entered if the identification is successful, and the standby status will be entered if the identification fails.

B. Product Features:

1) Up to 91% work efficiency
2) Strong protection function
3) Working temperature scope of wide temperature range
4) 100% full loading aging test
5) Quake proof degree of automotive grade

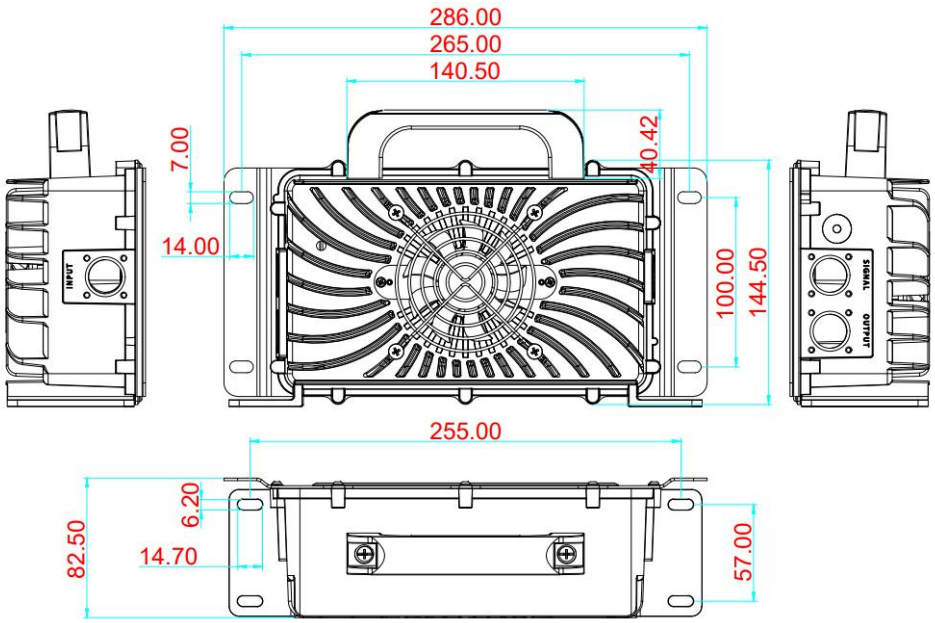
C. Protection Functions:

1) Output over voltage protection
2) Output over current protection
3) Output short-circuit protection
4) Output reverse protection
5) Charger over temperature protection

D. Attentions:

1) This charger is only suitable for charging lithium batteries, and it is forbidden to charge lead acid batteries.
2) Please make sure your local mains power supply meets the input voltage of the charger before use.
3) Make sure that the positive and negative poles of the charger DC output wires are correctly connected to the battery terminals: brown (red) → positive +, blue (black) → negative -.
4) Place the charger in a well-ventilated to prevent the machine from overheating while charging.
5) Dust-proof should also be taken into consideration to avoid influencing heat dissipation effect because of surface dust accumulation.
6) In view of safety and electromagnetic compatibility, the charger equipped with grounding wire by default.
7) Do not attempt to repair or service the charger yourself. Open the cover of charger casually may result in electric shock hazard or other damages. Take it to a qualified service person when service or repair is required.
8) Batteries produce hydrogen gas, which can explode if ignited, never smoke, use an open flame, or create sparks near the battery. Proper ventilation is required when charging.
9) Charger mounting plate should be fixed on horizontal level on the vehicle and keep heat radiator vertical, there should be left more than 10 cm space between radiator and around side to ensure good heat radiation status.
10) If the battery is found to be abnormal or damaged during work, please disconnect the power supply immediately.
11) To avoid damage to the charger wire harness, please do not place objects on the charger wire harness or place it where it is easy to be stepped on, and if the wire harness is damaged, please replace it immediately.

E. Product Size:



F. Indicator State:

Standby/ No load	Green on
Charging	Red on
Fully charged	Green on
Protection Status	//// Green red green flashing and stop for 4 seconds

G. Abnormal faults and solutions:

Abnormal faults	Solutions
Green red flashing	Output short-circuit, check the wiring of the output terminals, and eliminate the short circuit
Green red flashing	The battery is not connected or reversed, check the battery connection, connect the battery correctly
//// Green red green flashing and stop for 4 seconds	Protection Status, need to unplug the power supply and output connector, and restart it after 5 minutes

H. Working Environment:

NO.	Item	Technical target
1	Working temperature	-10℃~+45℃
2	Storage temperature	-40℃~+70℃
3	Relative humidity	5%~95%
4	Heat dissipation method	Forced cooling
5	Waterproof grade	IP67

USER MANUAL

WATERPROOF CHARGER

LITHIUM BATTERY CHARGER

Please read this manual carefully before use!

Subject to change without prior notice, please feel free to contact us for the latest information