50 Watts "stove top" Thermoelectric Power Generator

Description

The below is a "stove top" thermoelectric generator for any type of cook stove or pilot flame heat sources. The generator can be just simply placed on the stove to generate 50 watts DC electricity by converting the heat source collected from the flame of the stove. The generator is equipped with the outputs of 14 VDC for deep cycle battery charging, and of 12 VDC or 5 VDC for powering electronic products. The generator comes with a self-powered fan and cooling system to dissipate the heat. When the collector of the generator is heated to 350 °C, the output power will go over 50 watts. The Generator is good for running on 330 °C to 450 °C heat source.

The unit is light in weight, small in size, easy to carry or install to any hot surface.

Patent No.: ZL 2011 2 0010954.2, ZL 2010 1 0219930.8, ZL 2010 2 0252414.0







The 50W generator comes with the wire for the outputs: 12 VDC car lighter adapter, 5 V USB, and 14 V for deep battery charger

Specifications:

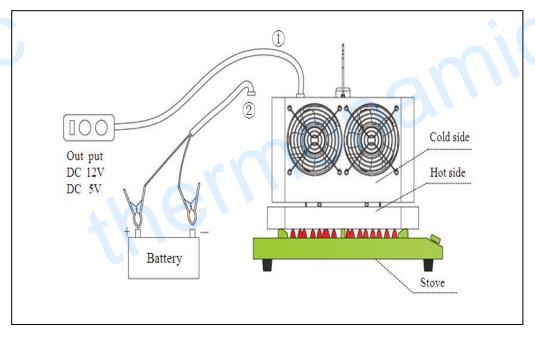
temperature of hot sourced

Part Number	TEG-ST50-12V	290
Output Power	50 Watts	
	12 VDC from car cigarette lighter	
Output Voltage	adapter	
	5 VDC from a USB port	
Output Voltage	>13 VDC	
from Charger	>13 VDC	
Maximum	150 000 100	1. Water tank
Temperature	450 °C (Hot surface)	2. Casing
Dimension Size	320 mm × 290 mm × 220 mm	3. Cold side
Difficusion Size	320 IIIII × 290 IIIII × 220 IIIII	4. 4 pcs TEI
Weight	6.3 kg	5. Hot side:
The output above	is under 450 °C surface	50 Watt "Stove Top" Thermoelectric

e: cooling blocks EHP thermoelectric modules : Heat sink

50 Watt "Stove Top" Thermoelectric Generator Diagram

How to use



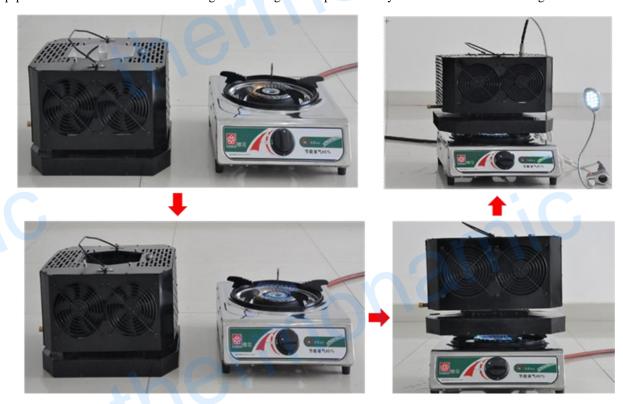
The plug ① gives the output of 12VDC from cigarette lighter socket and 5VDC from its USB port.

The plug ② give over 13VDC for battery charging.

It circulates the hot air for large area heating and save the energy.

Instructions in use

- (1) Remove the top lip of the water tank, add water until it reaches the mark.
- (2) Put the generator on the top of stove. About 60~90 seconds later, the cooling fan of the generator starts running and the water flows from pipe. Wait for 5 minutes till the cooling fan running at full speed. Then you can add the load on the generator.



(3) How to install and uninstall output wires:

Install:







2) Align and insert



3) Clockwise rotate to lock



4) Completed installation

Dismantle:



1) Disassemble



2) Anticlockwise rotate to unlock



3) Pull out



4) Completed disassemble

Notes

- (1) keep enough water in the top tank.
- (2) 60~90 seconds after the generator is placed on the stove, please check if the fans start to rotate. If you do not see the fan starts to blow the air. Please take out the generator to check. To remove, please use the hanger on the top of the generator.
- (3) Generator can operate at temperature up to 450 °C heat source surface.
- (4) If the water temperature is over 60 °C, please change water to cool down temperature.

Packing List

(1)	50 W "Stove top" thermoelectric generator	one	set
(2)	Cigarette lighter (with USB port)	one	set
(3)	Battery Charging clip	one	pair

Serial Number

Date		
NO.		
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