# **30 Watts Hot Water Thermoelectric Power Generator**

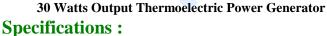
## **Description**

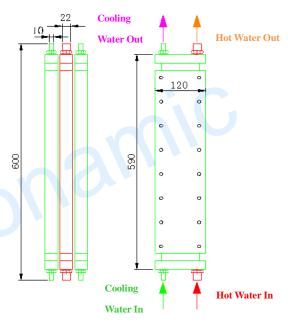
The 30 watts thermoelectric generator runs with circulated 80 - 100 °C or less hot water which distributes the heat to each thermoelectric module (TEM) to generate electricity. The cooling of the generator is by using 30°C or below cold water, which brings out the heat that passes through the modules effectively. The generator is good for waste heat recovery or geothermal heat.

The thermoelectric power generator consists of thermoelectric modules, hot water pipe for hot water circulating to bring the heat to each module, cold water pipe for water circulating to bring out the heat. The hot water flows from bottom of the generator to bring the heat to all the hot sides of the modules and out from the top cooled water outlet. The cold water flows from the cooling water inlet in the bottom, pass the modules cold side to bring out the heat that flows through the modules, and then out from the top cooling water outlet.

The generator is installed with 16 pcs 55 mm  $\times$  55 mm modules. It can generate over 30 watts if the hot water is over 90  $^{\circ}$ C and cold water is 30  $^{\circ}$ C with 3.5 liters/per minute flow rate.



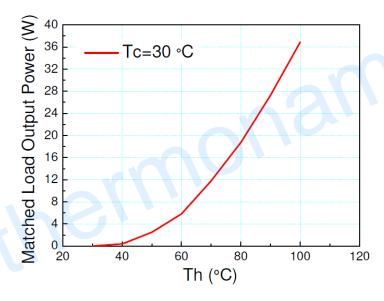




 ${\bf 30\ Watts\ Output\ Thermoelectric\ Power\ Generator\ Diagram}$ 

Part Number	TEG-LL-30-12V
Heat source/Water temperature( $^{\circ}$ C)	90 / 30
Matched output power(W)	30
Open circuit voltage(VDC)	32
Matched load output Voltage(VDC)	16
Matched load output current(A)	2
Working pressure of water tank / Mpa	0.35
Dimension Size(mm)	106 ×120 ×600
Weight(Kg)	17

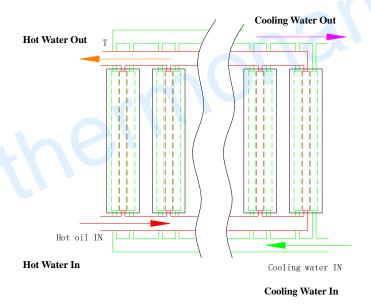
## Matched load output power curve with Tc=30 ℃



#### **Instructions in use**

- 1. Connect hot water and cool water pipelines to the generator, if it is put in upright positing, it is better to let the water enter from the bottom and drains out from the top. The output voltage is high, please be careful and do not touch the output. The output is DC.
- 2. You can install a lot of units into a larger hot water pipe for larger output power. If you install 10 units, it can generate 300 watts.

  Please see below.



### **Notes**

Please drip the water when you do not use to keep dry.

# **Packing List**

30 Watts generator

one set

#### **Serial Number**

Date	1001
NO.	