

ABSTRACT

Along with the development of technology in the digital era need a new source of electrical energy can support the needs of human needed. One of the energy that has not been utilized optimally is heat energy. The use of heat energy as an electric energy generator can be done using the Thermoelectric Generator (TEG).

Thermoelectric Generator can be used to produce electrical energy with the temperature difference between the Thermoelectric Generator side with the other side, this theory is in accordance with the seebeck effect theory which is a reverse phenomenon of the peltier effect.

In this study using the TGPR 22W 7 V type of Thermoelectric Generator will be heated with a heater plate on the hot side and the heatsink will be attached to the cold side to remove heat. The Thermoelectric Generator output will be increased by using Boost Converter IC8301 and stored on the storage media is Li-Po Battery 3,7V 200mAh. The Thermoelectric Generator output can be stored by Battery ad 19% of a battery capacity or can store from 3.15 V to 3.35 V with a time span of 300 minutes.

Keywords: Thermoelectric Generator, Heat shink, Li-Po