ABSTRACT

Solar cell is a device that convert light energy from the sun into an electricity that is still have many disadvantage, among them it is still expensive to buy, low efficiency and it is easily disturbed by external factors such as changes in light intensity, temperature changes, and others. Therefore a lot of research is needed, the results of which are expected to make photovoltaic will be used by many people.

In this resaerch will optimizing power output of solar cell using a simple cooling system that works flowing the water above the surface of solar cell. Then the current, voltage, and power will be measured.

The result from this resaerch is power output of solar panel that using cooling system is increase about 4,26% with the maximum increase of power reachabout 8,08%. The temperature that using cooling system are drop significantly about 2,99°C compared to solar panel without cooling system.

Keyword : Solar cell, temperature,