

ABSTRACT

One effort to maximize the renewable energy sources is used solar panel or we often called solar cell. Solar panel is a tool that capable to converting solar light energy into electrical energy. That is the reason why people start using solar panel in their home. Solar panel is not only use in a building, but also used in vehicle nowadays like in the ship and the car. But most of solar panel just plugged in their home and the character is static or just stay in one direction. While the direction of sunlight will always change its angle every time, this causes the absorption of solar energy by solar panel less than optimal.

In this final project, the system that will design is control system design who works following light direction even the location and sunlight direction are changing. Solar cell controlled by one microcontroller and two servo motor to regulate the solar cell position to always follow the direction of the sunlight.

The result of this final project is solar panel with control system generate 7.3% more average power than static solar panel.

Key Word: Solar Panel, Servo Motor