

ABSTRACT

In this modern era the need for energy is increasing and fossil materials will eventually run out, therefore to meet the needs that must continuously utilize other energy. The other energy is renewable energy one of them is solar energy. Where the sun are the main source of energy that will be converted into electricity. By using solar panels that are made from semi-conductor functions as a device that can change the energy of sunlight into electrical energy using the photovoltaic effect process. This solar panel component is the most important thing for solar power generation systems. As it develops technology, many types of PLTS systems that provide innovation. In terms of installation that is by mounting fixing, single axis tracker, dual axis tracker. The data used in this study are comparison efficiency of daily production output data from dual axis solar tracker and fix mounting using intensity data base per 15 minutes. Later on, this data can help to choose the type of installation that suitable for getting maximum energy output. Obtained the results of a comparison of the presentation of solar energy production with dual axis solar tracker system and fix mounting for 21 days dual axis solar tracker is 23.43% bigger than fix mounting. Therefore the PLTS installation system can produce output more maximum by using a dual axis solar tracker system.

Keywords : Solar Panel, PLTS, Dual Axis, Fix Mounting