

DESIGN OF A SOLAR POWER PLANT MONITORING SYSTEM ON ENERGI CARS BASED ON THE INTERNET OF THINGS

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ABSTRACT

Energy carts are a new innovation that utilizes sunlight to generate electricity. In the context of energy carts, solar power plant is a more efficient and environmentally friendly solution that is being developed for the utilization of renewable energy that relies on fossil fuel sources. Off-grid solar power plant has a system that is not connected to the main network. Batteries are components used to store and distribute energy when using loads. Indonesia has the potential to utilize solar power plant with a potential value of solar radiation intensity throughout Indonesia having an average of 4.8 kWh/m² per day. This study focuses on monitoring the solar power plant system on the energy cart. Monitoring is a tool used to monitor the performance of the solar power plant system. The parameters displayed include voltage, current, power and savings in the use of solar power plant. The results of the field experiment showed that the energy cart was able to be a source of electricity used to boil water.

Key Word: *energy cart, Monitoring, Solar Power Plant Off-Grid*