

ABSTRAC

Electrical Energy is one of the basic needs that is very important in human life, where until now the delivery of electrical energy for any low voltage 220 Volt is still using electric cables. One way of sending or transferring electrical energy that continues to be developed today is wireless electricity energy transfer. Wireless electrical energy transfer has several advantages compared to using cables, which can increase the comfort in using electrical equipment and can reduce the amount of electricity used and can reduce the power that will be used on the lamp, because it uses LEDs. Using LED installation without cables can simplify and reduce the cost of electricity consumption and fire hazard. The result showed a 12 Volt Voltage can produce wireless transfer energy performance with 60% power efficiency. The Farther the distance the smaller the efficiency that can be done affects the voltage, current, and power received.

Keywords: LED, efficiency, wireless energy transfer.