

ELECTRICITY EFFICIENCY OF RESIDENTIAL HOUSE WITH AUTOMATIC SWITCH ON OFF USING EWELINK APPLICATION - SMART HOME

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ABSTRACT

The use of electrical energy sources that are carried out continuously and uncontrolled and unscheduled is the main problem in this electrical energy deficit, which becomes a problem in the electrical energy generation sistem, which is not directly proportional to supply and demand. In addition, negligence in using excessive electrical power is often a major problem for high electricity bill payments. One of the efforts made is to make electric power efficiency in terms of utilization. In residential homes, problems in operating the use of electricity are not efficient, from installation construction to electrical installation equipment that is not energy efficient. In this thesis, an on-off switch (sonoff) is used to help make efficient use of electrical energy which is a device that is connected to the electrical network in a residential home which is then connected to a Smartphone via the eWelink-SmartHome application. This tool works automatically by utilizing wifi and internet networks to regulate the on and off electrical connections in residential homes, making it easier and more efficient in electricity consumption. In the test, the cost savings that can be achieved by using the switch on off automation sistem are 191,7% of the costs that must be incurred when operating the sistem automatically.

Keywords: efficiency, eWelink-SmartHome, switch on off (sonoff).