

Abstract

When the house is left for days, many people turn on the lights and keep burning until the homeowner returns, because there is no automatic tool to control electricity. Here a system is formed to remotely control electric power using Android, so users can manage electrical energy requirements such as remote electrical termination and can prove a comparison of measurements of electric power consumption from before and after the usual equipment per day. In a previous study 24 hours of electricity usage spent 2.114 kWh less than the usual usage of 2.827 kWh [3]. Electricity control is also done by storing electricity usage data within 24 hours to the cloud of Thingspeak. The results of the tests that have been carried out in the form of the total electrical power stored during certain hours of each device to cloud Thingspeak, remote control of power using SonOff devices are given timers of each measured device so that the equipment can automatically be turned off, and also the use of electric power using a system of 15.5% is more efficient than without a system so that the implementation of this system can save electricity usage.

Keywords: Long distance control, Arduino Uno, SCT-013-030, Thingspeak, SonOff.