

ABSTRACT

Based on the ministry energy and mineral resource's article a waste of electrical energy was done by human is 80% and 20% caused by technical factors and the extravagance in house holds is 10%. Uncontrolled discharging of electrical energy caused by the lack of awereness user consuming the electrical energy. In this case the absence of monitoring for discharging electrical energy. Innovation needed to handle this issue was to create a system for monitoring electrical's consumption in real-time.

Real-time data logger based on internet of things (IoT) and cloud storage is a system integrated with internet be able to monitor electrical consumption in real-time by smartphone and personal computer while it is connected to the the internet and the data will be saved on database.

In this research of final project is purposed to create a device based on in internet of things (IoT) and cloud storage. The function of the internet of things (IoT) be used for integrated the system with the database for monitoring electrical consumption. Moreover, this fitur was used for sending a notification to user amount of the electrical energy and token.

Based on result of the research, the system been able to monitor electrical consumption with smartphone by Blynk and personal computer to access the website is good. The average of time for sending data from the microcontroller to platform Blynk is 1s and 8s for sending the data from the microcontroller to database. Maximum value of error is 0,080, percent error is 0,55% and accuracy is 100%.

Keywords : *Real-time, Data Logger, Cloud Storage, Internet of Things (IoT), Database*