

MONITORING SYSTEM FOR HOME ELECTRIC POWER USAGE BASED ON INTERNET OF THINGS (IOT)

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ABSTRACT

The use of electricity in homes often goes unmonitored, leading to energy wastage and uncontrolled electricity costs. This issue becomes more complex with the increasing number of electronic devices in households. The purpose of this study is to help users reduce energy wastage and optimize electricity usage at home by providing accurate information on electricity consumption. The system testing results show that the system can provide accurate information about electricity usage. Users can monitor the power consumption of several household devices over a certain period, helping them manage energy consumption more efficiently and reduce energy wastage. To address this problem, a power usage monitoring system based on the Internet of Things (IoT) was developed. This system allows users to monitor electricity consumption in real-time through mobile or web devices, facilitating more efficient energy management.

Keywords: Internet of things, nodemcu ESP8266, PZEM-004T