ABSTRACT

Electrical energy is the primary energy needed for electrical equipment or energy stored in electric current with units of amperes (A) and electric voltage with units of Volts (V) with the provision of electrical power consumption needs with units of Watt (W). Over time, electricity consumption in Indonesia has increased, so detecting the amount of electric power is increasingly complex and less accurate due to a lack of resources. To overcome these problems, the author designed a tool, namely the ***Power Monitoring System****.*

In this research, a system designed that can monitor and control electrical power based on IoT (Internet of Things) by using the PZEM-004T sensor and ESP8266 microcontroller, which then process some data with the hope that users can use this system through the website and can control the electrical energy used effectively.

The research results are that the tool can read and display the website's voltage, current, and power values. After the research, the average voltage value was 226.70 V, the average current value was 0.13 A, the average power value was 8.60 W, and the average energy value was 0.09 KWH.

Keywords*: Power, Electricity, Website, PZEM-004T, Internet*