

ABSTRACT

The increasing use of electronic devices in an office building is directly proportional to the electricity needs used. Lack of public concern about electricity energy savings, because information about electricity consumption is still done manually, and less specifically related to the number of currents, voltage, power, power factors and the effect of load changes. In this study, researchers created an android app that can monitor 3 phases of electrical power. The app has features that can monitor daily electricity usage by displaying current, voltage, power, energy and power factors in real time and can be accessed remotely. The system uses Power Meter as a sensor, NodeMCU as a WiFi module as well as Antares and Firebase as a cloud platform for storing data online. Power Meter can measure current value with an accuracy rate of 97.8%, voltage accuracy reaches 99%, and power accuracy of 96.9% based on sensor testing data against research load.

Keywords: *Power Meter, Nodemcu, Antares, Firebase, Power Monitoring, 3 phases*