ABSTRACT

Information media is a very important medium in communication. So that the information provided is easy to see and read, the media used is placed in a clearly visible place. Currently, information is an integral part of the performance process. With technological advances, there are many new types of information media that use electronic media which are used not only as news media, advertising media, but also as information media located in buildings or offices. The display running text matrix can be used to make text according to the desired character. In addition, all work and human needs are highly dependent on the presence of electrical energy. Human negligence in the use of electrical energy will cause waste which also has an impact on increasing the cost of using electrical energy. Therefore, a tool is needed that is able to monitor electrical power consumption and is able to limit the current use of the load, even though the user of electrical energy is not in place. Of course, to make this tool requires a voltage sensor, ACS712 current sensor, Arduino nano, and NodeMCU. This tool will monitor IoT-based power, and can be monitored via the internet in the form of a graphic display on the thingspeak.com server. The results of this design can measure voltage 1 and sensor voltage 2 with an average error value of 1.75% and 1.38% and current measurement which has an error value between 0.22% to 3.82% with an average error value of 1.46%.

Keyword : Power Monitoring, Running Text, ACS712 current sensor, Voltage sensor