

ABSTRACT

Smart home is a blend of information technology that is applied in the house or the building to give the efficiency of the device and saving the electronic devices in the home. One of the problems that occur from the smart home is safety on electricity in everyday life in the house like a switch. As the owner of the house when you go in a hurry or when it rains lightning often forget to unplug the electronic devices mounted on a power outlet, creating the risk of the occurrence of a short circuit or damage to the device. Therefore needed protective system on the power outlet to facilitate with , controlling remotely. A system that has been applied consists of four main components, namely the Microcontroller Arduino UNO, a Non-Invasive AC Current Sensor, Relay module and NodeMCU ESP8266 12. This Sensor can issue the value of the current in each load is connected at the wall outlet. Sensor Data is first forwarded to the NodeMCU ESP8266 and can be accessed by the web as a tool for control. From the results of the experiments, this equipment can control the wall outlet to disconnect the current if the power outlet is detected on each load and the current in each load connected to the power outlet.

Keywords: mikrokontroler, relay, module esp8266