

ABSTRACT

The use of internet in the globalization era is very high as the development of communication and information technology. Internet of Things or (IoT) is the use of the Internet connected to the system continuously and utilize data sharing capabilities so that it can be used to control the equipment of electronic equipment all connected to the network that is always active. One application of IoT that develops today is the application of IoT on the Smarthome system. The creation of a smarthome system uses two control systems through manual control with the web as well as automatic control with the sensor. In this research, smarthome system test is done by seeing the accuracy of the sensor. In the LM35 sensor testing the temperature rise level of 10,0019,9528 mV every increase of 1 ° celcius. So from result of measurement and characteristic obtained result of difference of error 0,0199528 mV. In testing the PIR sensor can detect humans at a maximum distance of 7 meters with a 90 ° angle with a long detect 3.2 seconds. At an angle of 60° as far as 4 meters with a response of 3.1 seconds and 45 ° with a distance and response of 4.2 seconds In addition the human PIR sensor capable of detecting the cat with the furthest distance is 2 meters with 90 ° long detection angle for 3.5 seconds. Angle of 60 ° and 45 ° sensor unable to detect. In the synchronization testing between the web and the sensor, the more influential control in the system is Control through the sensor because if the sensor detects the temperature above 26 °C then the fan automatically rotates, when pressed the off button on the web to turn the fan and fan can stop, Back because the temperature detected above 26 °C. Likewise on the lights, if the PIR sensor detects humans then the automatic lights will turn on even when pressed the button off on the web, then a few moments later the light will automatically turn on itself for human detected in the room.

Keywords: IoT, Smarthome, Sensor LM35, PIR Sensor, Telecommunication System