Abstract

Human need for technology is difficult dammed because there are many facilities that enable people to be able to optimize performance at work every time.

Currently mobile handheld electronic devices no longer only have the functionality of the phone or sms but improved to be a medium that can control every electronic device in the house.

This study aims to control the temperature and humidity in a room using arduino uno microcontroller that is controlled with android smartphone with wifi media.

Test results show that applications on Android smartphones can inform the state of temperature and humidity in a room. Control Room App on Android with Auto, Semi Auto (Cold, Hot and Hot) and Manual (Fans and Heaters) option.

Remote control distance on the Android app to Arduino Uno microcontroller is approximately
150 meters, The duration of delay that occurs when Arduino Uno processes the command from Android at 0-80 meters distance is 0.5 - 1 second and at a distance of 90-150 meters is 2-3 seconds.

References


Index Terms

Computer Science
Information Systems

Keywords

Arduino Uno, Wifi, Sensor DHT11