

DESIGN OF TEMPERATURE AND HUMIDITY MONITORING SYSTEM BASED ON LABVIEW AND ANDROID

by Sigit Yatmono, Deny Budi Hertanto, Faranita Surwi, Setya Utama

ABSTRACT

Temperature and humidity monitoring system is a monitoring application that is often needed in everyday life. Monitoring system created must be able to get the data in real time is also expected to record data based on time or data logging. In this research we try to develop temperature and humidity monitoring system based on LabView and Android. GUI which used to display data and data logging of the monitoring system developed with LabView. GUI software for smartphone developed using android software online via remotexy.com site. The monitoring system was developed using DHT11 sensor with Arduino UNO microcontroller and Bluetooth HC05 communication system. The results of the test show that the monitoring system could show its function properly that displays temperature and humidity data both on the computer screen and android smartphone screen. Logging data can also be read through a spreadsheet application after system shutdown. Bluetooth-based range of control reaches a maximum distance of 12 meters.

Kata Kunci: *dht11, arduino, LabView, android, Bluetooth*