

## ABSTRACT

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*Indonesia is an agricultural country and this sector plays an important role of the overall national economy. One of the livestock sub-sector that plays a role in meeting the nutritional needs of community protein and one source of protein can be obtained from chicken meat. Broiler farming requires special care because broiler chickens are susceptible to disease that can cause losses to farmers. One of them temperature and humidity that can affect the health of broiler chickens. Farmer's problem is using instinct to estimate the temperature and humidity conditions in the cage. From the problem of the breeder then created a system of automation and monitoring of temperature and humidity designed to facilitate the work of chicken breeder. This tool is able to detect the temperature and humidity in the enclosure, which is integrated with a hardware that can regulate the temperature and humidity. If the temperature and humidity are less than standard then the tool gives instructions to the light to light. Conversely, if the temperature and humidity are more than standard then the appliance turns on the fan to balance the temperature to be ideal again. Temperature and humidity levels in the enclosure are automatically sent to the LCD and data stored on the SD card module. The test results show that the temperature detection system and heater / heating system works well.*

*Keywords: Automation, Monitoring, Temperature, Humidity and Livestock.*