ABSTRACT

Infant Incubator is a closed container that the warmth of the environment can be set by means of heating the air to a certain temperature which serves to warm the baby. According to data from the statistics of measurement and calibration are performed by BPFK Surabaya in 2006-2007, there was a tendency of matter at temperatures and Over Heat on the mat. To overcome these problems it needs to make a monitoring system of air temperature on the tube infant incubator. This system uses a ZigBee network in the process of transmission of information regarding the condition of the incubator temperature and temperature conditions in infants.

At the end of the project, made incubator that is simple and inexpensive but does not eliminate the function of the incubator. The incubator uses a microcontroller as the central processing unit and add some tools to monitor the baby's health as well as measuring body temperature humidity gauge. Furthermore, infant health data will be sent to the treating physician via a network so that the baby's condition can be monitored at regular intervals remains despite the long distance.

The results shown are monitoring incubator incubator temperature, baby temperature, and humidity incubator. In the incubator, the incubator temperature was set at a temperature of 32-34 ° C, the warmth of the room after the needs of premature infants in general. Hope in the future, this system could be useful for doctors and nurses in the hospital to monitor the baby's condition, and the system can be developed again.

Keywords: infant incubator, controller, temperature sensor, zigbee, GUI