ABSTRACT

Infant incubator, or often called baby incubator is a tool used to care for premature babies. Infant incubator where the device serves to keep the baby's body warmth and moisture, prevent respiratory infections in infants and to isolate the newborn or premature infants who weigh less than 2.5 kg.

Infant incubator is to use the system microcontroller ATMEGA8535 as a data processor of 3 sensors are humidity sensors, temperature sensors and room temperature sensors of skin (skin), which will enter into port each ADC to be processed by the microcontroller. Where the room temperature sensor and the skin temperature using LM35 temperature sensors and humidity sensors using sensor 808H5V6. Output from the room-temperature processed in the microcontroller will be used to set the heater life and death.

Results of testing tools that get the error percentage at each setting the room temperature varies. At a temperature of 30C at the time of error = 0.4%, the temperature at the time of error = 0.258064516% 31C, 32C temperature error = 0.125%, at the time of the temperature of 33c error = 0.121212121%, at the time the temperature 34 ˚C error = 0.058823529%, As the temperature is 35˚C error = 0.285714286%, As the temperature is 36C error = 0.166666667%, As the temperature is 37C error = 0.216216216%, As the temperature is 38C error = 0.105263158% , As the temperature is 39C error = 0.051282051%, As the temperature is 40˚C error = 0:25%.

KEYWORDS: Temperature, Incubator, Humidity