

## ABSTRACT

*Infant Warmer is one type of elektromedik tool used to provide protection and keep the baby's temperature to remain stable, that is for newborn, premature or post-operative care. There are also temperature sensors that serve to control the temperature in the room baby and skin sensor mat that serves as a bookmark temperature these patients, as well as functioning as a therapeutic phototherapy in infants suffering from jaundice.*

*Given the importance of this tool is to provide protection and keep the baby's temperature to remain stable, and provide treatment to infants suffering from jaundice infant warmer then made modifications to phototherapy and skin sensors are equipped with digital systems.*

*Infant Warmer is a tool that consists of a series of temperature sensors, ICL7107 as controller and display driver circuits on the relay using the SSR is enabled as a switch for a heater. This tool has two measurements of the measurement and skin temperature.*

*The working principle of Temperature Control is to provide a temperature setting at room temperature is 32°C, 33°C, 34°C, 35°C, 36°C, 37°C. It was made by using a dry heater as the heating and the use of digital systems with ICL7107 as the controlling circuit on the display.*

*Based on the results of measuring the temperature of 32°C with an error (error %) equal to 0,18%, measuring the temperature of 33°C with an error (error %) equal to 0,36%, measuring the temperature of 34°C with an error (error %) amounted to 0.29%, measuring the temperature of 35°C with an error (error %) equal to 0,57%, measuring temperature 36°C with an error (error %) amounted to 2.28%, measuring temperature 37°C with an error (error %) amounted to 0,49%. Therefore we can conclude that this tool is able to run well as in space heating mat and can detect the temperature of the patient because of the buzzer that indicates whether hypothermia or hyperthermia.*

---

*Keywords: Infant Warmer, Temperature Control*