# *ABSTRACT*

***Scales in the world of health are used to measure human body weight such as baby scales. Newborns are very important to be weighed because it is used as a measure of the baby's health indication ranging from 2.4 kg to 4.2 kg. The purpose of this study is to make it easier for users to weigh with a 7 segment display on the Infant Warmer tool and external calibration. By using a loadcell sensor with a maximum capacity of 5 kg, the loadcell can detect the weight of the load where the voltage generated by the loadcell of 0.7 mV at a load of 1 kg is amplified to 0.62 V by the PSA circuit using the AD620 IC and then processed by Arudino UNO as a microcontroller. The weight results will be displayed on the 7Segment display located on the Infant Warmer tool. In this study, the measured load included weight 0 kg to 5 kg. The measurement of the data results was carried out 5 times each experiment by comparing the modules that had been made with the standard weight (lead). Then the data from the measurement results of the research module shows the largest error presentation of 0.08% at a weight of 1 kg. And the data from the measurement results of the research module shows the smallest error presentation of 0.01% at a weight of 3 kg. Making a research module in the form of a scale placed on an infant warmer can make it easier for the wearer.***

***Keywords: loadcell, IC AD620, Infant warmer, scale***