

ABSTRACT

Scales are the tools used to measure the mass of an object, while the height meter is used to measure the height of the human body. From both parameters can be obtained various kinds of information such as Body Mass Index (BMI), protein, carbohydrates, fat, calories and others. Calorie is one of the content in foods that benefit the body as energy intake. Each person's calorie needs differ by age, height, weight, gender, and level of activity per day.

This tool is used to measure weight and height and BMI and calories. To know the weight used load cell sensor. The load cell output will be amplified by Analog Signal Conditioning HX711 and then processed in microcontroller, then will be displayed on the minimum arduino system. In the LCD panel there are several push button to enter the age and gender settings. The design of this study using pre-experimental method with the type of research One Group Post Test Design.

Based on the results of weight measurements obtained error 0.195 results so that it can be concluded that this tool can be used according to its function, because the % error is still below the standard $\pm 5\%$.

Keyword : Scale, Load Cell, Weight, and Calorie.