

ABSTRACT

Scales are tools used to measure human weight. A height meter is used to measure human height. Height is one of the most important anthropometric parameters. Of both parameters can determine various information such as Body Mass Index (BMI). BMI is obtained from the results of weight distribution and height squared. The normal threshold of Indonesian society Body Mass Index (BMI) is $>18,5$ until $<24,9$ if the Body Mass Index (BMI) is less than $18,5$ can be said to be thin and if more than $24,9$ can be said obesity.

This module is used to measure weight dan height as well as BMI and calories. Height measuring instrument using variable resistor (potentiometer) as a high sensor which will be driven automatically by motor. The output of the potentiometer will be processed by microcontroller which will be displayed on the 4x16 character LCD display.

Based on the measurement of height as much as 13 times per 5 cm obtained a maximum error of 0,52%. So it can be concluded that this module can be used because the error value is still bellow $\pm 5\%$.

Key Words : Height, Potentiometer, Body Mass Index