

ABSTRACT

COVID-19 is a new type of corona virus that has shocked the world with a severe infection. Transmission is direct between humans through droplets from the nose and mouth, such as coughing, sneezing or talking. This easy transmission of COVID-19 makes the public worry that in a place, whether in a crowd or not, someone who is suffering from COVID-19 and who is suffering from COVID-19 does not know that he is suffering from COVID-19. This study aims to detect the symptoms of COVID-19 by measuring body temperature and oxygen saturation in the blood. Measuring body temperature is useful for knowing body heat, normal or fever, and measuring oxygen saturation in the blood is useful for knowing the state of the body is in good shape or is tired. The design results are made using the MLX90614 and MAX30100 sensors. MLX90614 sensor for measuring body temperature and MAX30100 sensor for measuring oxygen saturation in blood. The measurement results in this study resulted in an accuracy of the comparison of the MLX90614 sensor and the thermogun, at a distance of 2 cm of 93%, a distance of 4 cm of 99.6%, a distance of 6 cm of 93,2%, and an accuracy of the comparison of the MAX30100 sensor and pulse oximeter of 99.7% and functionality testing has a success rate of 100%.

Keywords: COVID-19, MLX90614 sensor, MAX30100 sensor.