ABSTRACT

Currently, the thermometer has been widely used by the public. In general, thermometers are designed for people who have normal physical conditions, especially in the ability to see. Disabled people, especially blind people, will find it difficult to use the existing thermometer, especially with the current pandemic situation, which is likely to spread COVID-19 quickly. In connection with this problem, non-contact body temperature measurement is needed with sound output and a wireless system so that there is less possibility of exposure to disease, this study describes a non-body contact thermometer with sound output via wireless. The purpose of this research . to make it easier for those who have limitations to see and reduce exposure to covid19 between patients and users. The method in this study uses MLX90614 as a sensor, the output of this sensor is digital data, HC-SR04 as a trigger on the MLX90614 sensor, DF player as a reader on recorded data that has been recorded via Google and stored on the SD card and XBEE module for transceivers. data to pc. Temperature testing is done by comparing the module with a standard tool (digital thermometer). The error obtained from the module at normal temperature is 0.98% and the smallest error is 0.1%, then for the hypo temperature the largest error is 1.80% and the smallest error is 0.42%, and at hyper temperature the largest error is 1 .75% and the smallest error is 0.10%.

Keywords: Termometer, Non contact, Temperature, HC SR-04, MLX90614, DFPlayer Mini, XBEE S2C