ABSTRACT

Patient Monitor is used to monitor a number of non-invasive patient health parameters that require continued monitoring for a certain period of time. Vital signs of human health can be identified from body temperature, breathing, blood pressure, and pulse. In this study respiration value was taken using FC-04 as a breath detector, and using DS18b20 sensor which was placed axially for body temperature. All measurement parameters will be displayed on Nextion TFT. Temperature sensors use DS18b20 which converts temperature into digital data. Respiration sensors use FC-04 which converts sound vibrations into digital data, then converts it into a half-wave signal through an envelope series. The tool comparison test results get an error value of a maximum error value of 0.33 Celsius for Temperature, and a maximum error value of 5.4% for Respiration. The test results for temperature parameter sensitivity are 100% while the parameter is 73.3% for respiration parameters. For the specificity values of all parameters 100%. Of all the error values produced, there are no measurement parameters that exceed the permitted error limit so that the Design of Portable TFT Viewing Devices with Graphs (Temperature and Respiration) is declared feasible.

Keywords: Temperature, Respiration, Nextion