

ABSTRACT

Sphygmomanometer is a medical device used by medical personnel to determine the level of blood pressure in patients. Blood pressure measurement by sphygmomanometer is usually done with the help of a stethoscope to determine systolic and diastolic blood pressure. Sphygmomanometer is one of the tools that is often used by health workers to perform examinations on patients. The high intensity of the use of the causes a decrease in the quality of the tool, resulting in a decreased accuracy of the Sphygmomanometer. It uses the MPX5050GP sensor as a positive pressure sensor. This tool is also equipped with a leak test timer. The results obtained by the sensor will be processed by arduino and displayed to TFT Nextion 2.8" and can be stored in SD Card so that it can be further analyzed. After going through the process of measuring and calibrating the value of uncertainty and error is low enough for the value of uncertainty obtained from the calibration results using Multi Function station and Thermohygrometer that has been calibrated from BPFK 6 times, consisting of 3 times up and 3 times down obtained the smallest result 0% and the largest 0.52%.

Kata Kunci : MPX, Sphygmomanometer, TFT