

ABSTRACT

Vital Sign Monitor is a medical device to diagnose a patient who needs intensive care to find out the condition of the patient. Some parameters used in monitoring the condition of a patient include: Oxygen saturation (SPO2), and body temperature. With this medical device is expected to reduce the workload of nurses with doctors and can improve the quality of patient care.

The large demand for these devices, especially in hospital intensive rooms, is the basis for the realization of research on processing the output data of several vital sign monitor sensors in order to obtain accurate and precise outputs. The output of the two sensors is processed by Arduino Mega2560 and displayed on a 5 inch TFT LCD in the form of body temperature and oxygen saturation. Comparison of the results of the module with a calibrated standard measuring instrument becomes a reference that the module is possible for use with accurate and precise outputs.

According to the measurement and comparison of tool data with a comparison tool, the highest error value was 1%. With a maximum permissible tolerance of 5%.

Kata Kunci : Vital Sign Monitor, SPO2, Temperature Body