

ABSTRACT

Heart rate monitoring tool is a tool to monitor the condition of the patient, This tool will display the number of heartbeats, usually displayed per minute called beats per minute (BPM). Heartbeat testing is very important, to detect whether the patient has heart rate abnormalities or not.

Carotid signaling is one that can be used to measure the number of heartbeats, because carotid signals can show an R-R interval, and heart rate measurements in the carotid artery are more reliable than measurements on the wrist, especially in individuals suffering from some types of trauma. From this problem the authors make a tool that can calculate the heartbeat contained in the carotid artery Type of method used in the manufacture of this module using after-design method. Researchers only see results without measuring the previous state, although not randomized.

After the measurement of 5 respondents with pulse oximeter comparator, and analyzed got the average value error 0.97%, from this error value indicate tool made feasible to be used for measurement of heart rate because error value which allowed less than 5% then from result of analysis Sensitivity and specificity is obtained 100% sensitivity value while the specificity of this module is 100%.

Keywords : BPM , carotid pulse