

ABSTRACT

Central monitor is a tool in the health field that serves to monitor the patient's condition which is centralized in one monitor display centrally. In this scientific paper raised wireless systems for sending data to one monitor. In this module there are Electrocardiograph (EKG) parameters which are a parameter to detect and measure the electrical activity of the heart muscle using measurements of biopotential signals obtained from the surface of the body. From these measurements, an ECG signal will be obtained to produce a heart rate per minute (BPM). ECG signals are obtained from measurements of the electrical activity of the heart through electrodes placed on the patient's skin using the bipolar lead method. ECG signals will be processed using a microcontroller circuit as processors. Then the data will be sent to the PC using wireless HC-11. The data received by the PC, then processed using the Delphi application which will then display ECG charts and BPM results and abnormalities indicators if the BPM is in a condition above or below normal.

By comparing the module with a standard measuring instrument, the biggest error is 0.99% which is still in tolerance because the tolerance limit is 5%

Keywords: ECG, Heartrate, HC-11, Microcontroller