ABSTRACT

Heart rate and temperature's device in this time was developed with many variation, there are portable device, wireless and telemedicine. Monitoring patient's condition that doing house's treatment certainly not always on doctor's monitor. So we need a system to give notification to doctor, then offer a action. In previous device, there is not telemedicine feature, so writer develop it with.

Monitoring process in this device wirelessly dan telemedicine, so doctor or nurse can monitor heart rate value dan body temperature although in the other room. Writer uses android application to monitor wirelessly and SMS's notification for telemedicine process. Processing data from sensor till display, writer uses IC Atmega328.

Based examination result dan measurement at sixth patient for five times measurement and device comparation, had been difference, it is 3 BPM and measurement error is 1,2459%. After through calibration process, obtained uncertainty measurement's value has confidence level on 95%.

Kata Kunci: Monitoring, BPM, Telemedicine