

ABSTRACT

Currently, many hospitals have wi-fi networks installed, but they have not been optimally utilized for transmission of medical information. Medical record information in hospitals can be sent using wi-fi to improve the effectiveness of the work of employees and related physicians. Research in this thesis aims to improve the performance of cardiologists. One of them transferring data electrocardiograph other than through the flash.

The heart's electrical signal is tapped through an electrode connected to the AD8232 module via cable. Then the AD8232 module communicates with the mini D1 wemos as a featured module of wi-fi. Wemos D1 mini stores the information of the heart's electrical signal that has been converted into digital data in its memory. Then the doctor signaled the request to the mini D1 wemos so the information on the mini D1 wemos is sent to his notebook. Ultimately the notebook displays ECG signals on the monitor for further diagnosis by a cardiologist.

The author hopes that biometric signals on the electrocardiograph data transmission system with this wi-fi media can be sent more than 100cm.

Keywords: wi-fi, *electrical heart*, ECG, AD8232, wemos D1 *mini*.