ABSTRACT

Progress of the technology was impossible to denied, no matter how progress of communication technology would came a consequence in comunication media. That is why the device of infus drop’s control have to designed completing with distance monitoring system.

This final project using wireless communications to transmite the data from microcontroller to the Personal Computer. RF Modules used is Brand Xbee Pro 802.15.4 type, with a 2.4 GHz radio frequency that requires a voltage source between 2,8-3,4 V.

On the server (PC) we use the Visual Basic language which connect to database to store data on the patient’s infus drops. This monitoring system is conducted to 9 patient’s rooms. The best send the data is on 9600 of boudrate in door with maximum distances ± 40m although in the out door with maximum distances ± 300m. From 500 data that has been sent, the percentage of data loss is about 0.15%. So, if data on the number of drops in one of the rooms was interfered then the program Visual Basic will display a response that indicates the existence of interference in the system.

Keyword: Monitoring, Wireless Communication, RF Modules, Visual Basic