

ABSTRACT

Infusion fluids that enter the body in the form of vitamins in liquid form, have a fairly important function in medical services, especially nurses. In the hospital, the patient and nursing staff are not balanced and do not monitor the patient for 24 hours due to this limitation, the negligence of the officer can really occur, especially in monitoring the infusion. Therefore, to avoid errors, a microcontroller-based infusion monitoring system is needed that can control the stability of infusion fluid drops in patients sent via radio frequency. in this system is designed to measure the volume of infusion fluid and drops per minute by an optocoupler sensor whose data will be sent by a radio frequency, namely LoRa SX1278 with a serial monitor display. Radio Frequency using LoRa SX1278 can be received by in an open room and if there are obstacles such as buildings can not receive data and 1. The system can measure the volume of infusion fluid on infusion squash and displays data on infusion fluid droplets and infusion fluid volume. With testing measured the volume of infusions with an accuracy of 1.82% and on the comparison of the system and manual approximately 1 drop of minutes..

Keywords: Infusion, Radio Frequency, fluid level, drops of minutes.