ABSTRACT

Administration of intravenous fluids or medications that enter the liquid directly into the veins in the amount and specific time by using the infusion set. One of the first formula in fluid administration sets the speed per hour (ml / hr). The next calculate the speed of nurses per minute (drops / min) by a factor drops in infusion sets.

Drip count per minute infuse set is a tool to account for the number of drops during 30 seconds. Droplets using a photodiode sensor and infrared. In making this tool the authors designed a system using IC mikrokontroler ATTiny 2313 main controller that is controlled by a timer and counter droplets on the seven segment display. In this tool the authors add indicators of a buzzer, for indicating the detection time runs out. For ease of use, the authors designed this module with a portable.

Based on the analysis of 20 drops / minute presentation obtained error of 1% and 0.3% error timers, for 30tetes / min obtained error of 0.6% and 0.3% error timers, drip 50 drops / min obtained error 0 , 4% and 0.3% error timer, drip 70 drops / min obtained error of 0.5% and 0.6% error timers, drip 90 drops / min obtained error by 0.4% and the error of timer 0 , 3%.

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Keyword : Drip count per minute infuse set, drip sensor, microcontroller, portable