

ABSTRACT

Infuse pump is a medical equipment which is design to control and regulate the administration of intravenous fluids in the treatment.

This module uses the L298N motor driver as a stepper motor controller. The choice of the infuse pump setting is the volume setting from 100 ml to 500 ml and the speed setting of 30 ml / hour, 60 ml / hour, and 90 ml / hour. The author uses the Atmega 328 microcontroller as a droplet controller per minute, volume and speed. Occlusion in this device is in the detector of the droplets that are alerted in the presence of a sound buzzer. This tool is also equipped with monitoring volume, tpm and speed on a wireless-based PC using HC-11 as a transmission from module to PC. This tool is equipped with occlusion.

The flow rate data processing in IDA from infusion got the highest error result at the setting of 30 ml / hour which was equal to 5.97%. the highest error for the calculation of droplets in the module is the setting of 30 ml / hour which is equal to 32% and manually at setting 60 which is 23%.

Keywords: Motor Driver, Infusion Pump, occlusion, wireless, Buzzer