## ABSTRACT

Water is an important part of human life. Water is used for human purposes such as the need for food supply, to human activities every day. The drinking water company that handles the distribution of clean water is the Regional Water Company or PDAM. The problem of providing clean water for the community is an important part so that the community always gets clean water without any disturbance in the process of distributing clean water. With the problems that have been described, an idea was obtained to create a tool for monitoring the flow of water sources that can be monitored digitally.

Flow Meters based on the Internet of Things is a tool used to answer the problem of monitoring the discharge of water sources. This tool uses the TUF200M Ultrasonic Flow Meter sensor, and the ESP8266 module. With hardware which is then integrated with the database, and the data can be accessed through the actual website, it is hoped that it can help overcome problems in monitoring flowrate at springs.

The results of the sensor calibration test carried out on a 4-inch pipe obtained the results on the main meter with the installation of the v-method transducer sensor getting an error percentage of 1.09%. The z-method installation got an error percentage of 13.54% and the w-method installation got an error percentage of 5.76%.

Keywords: Flowrate, Monitoring, Water Distribution.