

ABSTRACT

The need for water for daily life is increasing and many users are using air excessively. Therefore, a system is designed to read the water discharge. The sensor used in this research is YF-S201. Data from the communication system that is already connected to the microcontroller and sensors, can be read on the Internet of Things (IoT) platform without the total air discharge object coming out. The way the YF-S201 waterflowmeter sensor works is that when air passes through the sensor, the rotor will rotate and the rotor speed will match the incoming air flow. The pulse signal from the rotor will be received by the hall effect sensor to be processed by the microcontroller. The hall effect sensor itself is used to detect movement or direct the movement influenced by a magnetic field. The sensor test results obtained have an average error value of 3.10% and the accuracy value of the sensor is 96.90%. In the LoRa communication system, data will be read every 100 seconds, and the data sent is 100%. While WiFi, data will be read every 1 second, the average data sent is 95%. the resulting connection from both is 5V, the current generated at LoRa is 0.32mA, this can guarantee that LoRa has very low power. While the use of WiFi, has a current of 70mA.

Keywords: *flow meter, hall effect sensor, Internet of Things, LoRa, WiFi*