ABSTRACT

DESIGN AND IMPLEMENTATION OF WATER DISCHARGE MEASUREMENTS USING AN IoT-BASED WATER FLOW SENSOR

Development of measurement system progressively increased in line with the rapid development of technology. Because of this, the creation of a wide range of water discharge measurement. But still many water based discharge measurements are still manual, e.g. flow meter we see on housing in General.

In this final project, the author already implemented technology microcontroller on flow meter by using sensor water flow that was then controlled by the NodeMCU and calculated how much water comes out discharge, then the results will be shown into the application Android. Past results have been obtained in the form of per-month usage amount and will be shown also in the Android application that can be accessed through the internet network.

In this final project obtained the test results i.e. data accuracy sensor water flow which had an average reading of data of 0.34 seconds longer than the specified time, data accuracy overall testing tool without using the Blynk rated an average of 99.06% accuracy and data accuracy testing set point on an application that has a value of Blynk average accuracy of 97.91%.

Keywords: Flow meter, NodeMCU, Android, Water Flow Sensor, IoT