Abstract

Research titled Prototype of IoT-based Home Water Fiter Monitoring. In this study just monitored the level of turbidity and water flow. The output from the research that has been carried out is only a notification whether to do backwash or not.The water filter is currently still manual, where there is no automation in filtering and backwash funciton. The backwash function is a way to clean filter media with clean water by change the direction of water flow. Turbidity of the water used must be below 25 NTU and the pH level in the water to be used must be between 6-8 ph. In this study sugeno fuzzy logic method will be used to measure the level of turbidity of water and pH. The output of this study is the control of the filtering or backwash function. The backwash function will be performed when the turbidity sensor detects water purification results exceeding 25 NTU and the pH between 6-8 or water is normal, and filtering function will be start when the result of filtered water have turbidity level below 25 NTU and pH between 6-8. The results of this test is system can read value of water turbidity and pH Value and then can control the backwash and filtering function

Keywords: Turbidity sensor, pH sensor, Fuzzy Logic, backwash, filtering