

ABSTRACT

Cendana village has a PAMSIMAS which is used as daily necessities by local residents, water in the PAMSIMAS reservoir is obtained from the main source, namely the river. But sometimes the water from the river can not be known the level of cleanliness. The purpose of this research is to produce a tool that can be used in monitoring water quality. Therefore, in order for managers to check water quality at PAMSIMAS, a solution is needed in this case so that managers can monitor the quality of water, namely by designing a monitoring system tool. This monitoring system is built using a Turbidity Sensor, TDS Sensor, pH Sensor, and NodeMCU as a microcontroller, so that this system can send monitoring data through the website. The result of this research is the creation of a water quality monitoring system tool that will be used to carry out remote monitoring based on the internet of things. Based on the results of the tests carried out on each sensor, thirty experiments were carried out, with an average value of the percentage error at pH 2.07, turbidity sensor 1.19% and TDS sensor 2.14. From the results of measurements that have been carried out using water from Pamsimas, it can be concluded that the water can be used and is in accordance with the requirements for Drinking Water Quality by the Minister of Health.

Keywords: Pamsimas, Internet Of Things, NodeMCU, Water Quality.