

ABSTRACT

Carp farming is one of the most popular activities in Indonesia. 56,539 tonnes, this makes domestic carp production quite small, where there are several factors that affect the production of carp, one of which is changes in water quality that make carp growth slow, and not being able to know the quality of water in carp ponds which is one of the challenges for carp farmers and having to go to carp farming ponds to check manually, and the distance of electricity distribution which is still not available. The parameters that will be monitored are measured water pH, water temperature, oxygen formed in water and power used. Using the Internet of Things technology microcontroller lynx 32, this research system is a monitoring system on the IOT platform. Lynx 32 has the ability to transmit and receive real-time carp pond water quality data and is sent to the IOT platform whose task is to record and store any changes in water pH, water temperature, oxygen dissolved in water and provide alerts when water quality values are not up to standard. The results obtained from the ds18b20 temperature sensor with 0.14% error and 99.86% accuracy, pH sensor with 0.04% error with 99.95% accuracy and total dissolved solids sensor with 0.063% accuracy with 99.936%.

Keywords: *gourami fish, IoT, esp lynx 32*