ABSTRACT

For fish lovers, of course, you are familiar with the type of koi fish. This fish, which is also known for its beautiful colors and patterns on its body, has the sciemtific name Cyprinus carpio. There are many who keep this fish either at home eating, or used as decoration to beautify the appearance of houses, such as fish ponds. According to several studies conducted by experts, seeing koi fish can make blood pressure & heart rate decrease and can cause a sense of happiness in the human body. Therefore koi fish are in great demand among ornamental fish lovers.

Behind that koi fish is also one of the fish that is sensitive to the quality of pond water. If not overcome, it will be able to cause several diseases that can cause death in koi fish if the quality water parameters are far from the ideal parameters set, therefore temperature, pH, and TDS are very important in the running of this Internet of Things based monitoring system tool. The ideal temperature for koi fish is in the range of 20-25 °C. Then For pH parameters that is good for koi fish is between the range of 6.5-8.0. As for TDS itself, the range is between 200-500ppm.

The results of testing this monitoring tool are carried out to find out the device (temperature sensor (DS18B20), pH meter sensor & TDS meter sensor) this will work. This test is divided into two parts, namely in the early days and morning each a total of 10 times with each test carried out for approximately 5 minutes.

Keyword: Cyprinus carpio, Internet of Things, temperature, pH, TDS.