Design and Build a River Water Level Monitoring System Using Arduino Uno-Based Solar Panels
Adviser (Ir. Michael Joko Wibowo, M.T)

Aldy Noer Satrio

Study Program Renewable Energy Engineering
Engineering Department

ABSTRACT

In Indonesia, natural disasters often occur in various places. The geographical location of Indonesia is one of the factors. Indonesia is located at the confluence of two continental plates and at the equator, this makes Indonesia have a tropical climate with high rainfall, as a result Indonesia is very vulnerable to floods. Technology that is increasing very rapidly makes it easier for humans to do or do something, the rapid development of this technology has a positive impact on developments, especially in the field of electronics. In recent times the use of solar panels is often used for the main power supply source of a device that can save electricity usage, so it can be said that the use of solar panels is very efficient to save electricity. This prompted me to create an Arduino Uno-based flood mitigation tool and use solar panels. Data collection in this study was carried out for eight hours and the results of testing the tool that I made can be said to be successful because in several experiments there were only two data errors and the rest were sent perfectly.

Key word : *PLTS, Solar Panels, NiceRF, Water Level, Ultrasonic Sensor HCR-04*