

## **ABSTRACT**

*Wireless sensor network is a network consisting of a sensor that can detect a situation, the results obtained from the sensor will then be sent to the receiver. This system is not connected to the grid power supply which results in limited resources (energy) in the system. Users of the system need to know the power needed and used so that wireless monitoring of sea waves when stored at sea can be used for a long period of time. Therefore a solution that can be used for measuring battery power in wireless monitoring of sea waves. The test results show that the INA219 sensor's voltage and current measurement errors are 0,6% and 3,8%. The sensor node consumes current during transmission and transmits data of 49,44 mA and 42 mA with a transmission distance of 50 and set TX power to 17. Tx power affects current consumption at the sensor node.*

**Keywords:** Power Monitoring, Sensor INA219, Wireless Monitoring.