

## ABSTRACT

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*Wind is the flow of air that empties from areas of high pressure to areas of low pressure. Data on wind speed, wind direction, humidity and temperature are used to find out information on weather conditions before sailing to the sea. In knowing wind speed, wind direction, humidity and temperature are needed an accurate measuring instrument. The measuring instrument to be used is an anemometer which has an optocoupler sensor as a wind speed reader, a Wind Vane which has 8 hall effect sensors and a DHT sensor to read humidity and temperature. the purposes of the prototype measuring instrument are wind speed, wind direction, humidity and temperature to obtain information on weather conditions before sailing to the sea. The purpose of the application of measuring wind speed, wind direction, humidity and temperature is to minimize accidents before sailing to the sea. This study was conducted to monitor and make it easier for fishermen to obtain information on observing wind conditions. the results of monitoring wind speed, wind direction, humidity and temperature will be viewed through a 20X4 LCD and the data will then be sent to the website database via Nodemcu which is connected to the internet network.*

*Keywords: Anemometer, windspeed, direction, humidity, temperature, Nodemcu, LCD 20X4, hall effect sensor, WindVane.*