ABSTRACT

Sea level waves are something that is difficult to understand the situation. This is inseparable from the characteristics of very complex sea level waves. Sea level waves are essentially random waves that are formed due to various types of waves with certain frequencies that overlap with each other. By its nature there are two types of waves, namely: beach-forming waves and beach-destroying waves. In this research, the design of a monitoring system for sea level position will be carried out. The monitoring system is carried out by using the accelerometer sensor as a position detector. The accuracy of the measurement of the accelerometer sensor against a standard measuring instrument is 94.95%. Measurement data is sent automatically by the microcontroller and GPRS module to the Antares cloud with a duration of every 10 seconds. By sending sea level data to the Antares cloud, we can monitor sea level position directly.

Keywords: Ocean waves, accelerometer, microcontroller, monitoring system, GPRS, Antares.