

ABSTRACT

The tsunami was one of the natural disasters that caused devastating damage that caused many casualties. Tsunamis are generated by very large earthquakes that will be moved on maps of the Earth's crustal plates or by underwater volcanic activity. Looking back at the tsunami disaster that occurred in Aceh in 2004 which claimed 230,000 lives. At this time, tsunami information has always been informed to the public, done beforehand. This results in material and immaterial losses experienced by residents, therefore a tsunami early warning system is needed. In this Final Project, a tsunami early warning system is needed which works by sending data from the water level sensor and the vibrating sensor used in pushing the tsunami towards LoRa as a communication medium. Based on testing on this system it can send data on water level sensors and vibration sensors and verified tsunami notifications to LoRa recipients with a response time of 1-5 second (s).

Keywords: Tsunami, Sensor, LoRa, IoT.