

## ABSTRACT

Vehicle tracking system for shipping goods is something that is very important, vehicle tracking system is very helpful for agencies or companies sending goods to oversee the vehicle. In the design of vehicle tracking, the delivery of goods uses GPS to find out the location of the vehicle and the status of the vehicle. The design also uses an accelerometer sensor to determine vehicle acceleration. In this study GPS and accelerometer are connected to a microcontroller. The microcontroller will read the speed and location on GPS and acceleration on the accelerometer, which when the status is fast the speed will be in more than 65 km / h and acceleration of more than 100 m / s<sup>2</sup>. When the status is being the speed will be at 35 km / h - 65 km / h and the acceleration is at -100 m / s<sup>2</sup> - 100 m / s<sup>2</sup>. When the status is slow the speed is under 35 km / h and the acceleration is below -100 m / s<sup>2</sup>. Microcontroller will provide output in the form of location and status of the vehicle which will be sent via SMS to the smartphone.

**Keyword:** *GPS, Accelerometer, output, speed, acceleration , mikrokontroller*