

ABSTRACT

Safety is one of the main factors that are most concerned about, especially when the vehicle is being abandoned in a public place, vehicle owners certainly want to ensure that the abandoned vehicle is safe. *Global Positioning System* (GPS) Security is a navigation system designed to provide position and time information, at any time and in all weather conditions. GPS receives signals from satellites used by users in general called *GPS Tracker* or GPS monitoring, using this tool the user can follow the position of the vehicle and the working mechanism of the device created, when the tool is active GPS will look for signals, then the GPS will read *the data of the latitude and longitude* coordinates that will be stored accommodated in the *database* that has been created, and then sent a notification of *latitude, longitude* and *altitude* values to the Telegram bot on the *user /user's smartphone*. The previous test aimed to determine the level of accuracy of the two, and the difference results were obtained from testing the tool in different locations. To find out the distance of the difference between the coordinates on the module and the coordinates on the *smartphone*, the author calculates the difference in distance between the GPS module and the *smartphone* GPS. Based on the results of testing the accuracy of the GPS module with the actual position, the results were obtained that the difference in the average *error* distance was 2.052 meters with the closest *error* difference distance was 0.22 meters and the farthest error difference distance was 6.27 meters and the monitoring on this tool had a reliability of 90% said to be successful because the position of the monitoring results was in accordance with the location of the gps on *google maps*

Keywords: *Nodemcu, Gps Ublox Neo 6m, Latitude Longitude, Position monitoring, Security*