

ABSTRACT

Vehicle security now a days, is needed to reduce criminal cases such as theft. But security systems like an alarm, or double lock system still does not guarantee the security of the vehicle. Therefore, we need a security system on a vehicle that is better than before.

In this research, there will be designed a security system and tracking of vehicles developed from previous research on Final Project. Changes made at this time is to replace all the hardware components that produced smaller dimensions than before, and increase to the transmission of data using a GPRS connection. When the vehicle exceeds the specified maximum radius, then the system will turn off the vehicle's engine and sends a warning message to the owner in the form of SMS. Then the system will send coordinate data to the database server using GPRS connection. Vehicle owner can access the data with the application map on android that vehicle tracking easier if the vehicle is lost.

The results of design and realization of security and vehicle tracking systems, the device is totally changed from previous research. Where the previous tools WxLxH dimensions (12.5cmx 15cmx 7cm), but for the final is smaller with WxLxH (6.8cmx 13.8cmx 5.2cm). The security system can work well when the car exceeds the maximum radius of 1 km or in GPS reading (DD MM.MMM) is around 0,55. Increasing of maps on android app can help vehicle tracking easier if the vehicle is lost.

Keywords: GPS module, GSM GPRS Module, Microcontroller, Android