

**Rancang Bangun Sistem Keamanan Kendaraan Bermotor Menggunakan  
Sms Dengan Metode Gps Tracking Berbasis Arduino Uno**

*Design And Build A Motor Vehicle Security System Using Sms With Gps Tracking  
Method Based On Arduino Uno*

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***ABSTRACT***

*Personal transportation needs has increased from year to year, one of which is motorcycles which have very high purchasing power. Meanwhile, cases of theft and theft of motor vehicles still often occur around us. Motor vehicle theft occurs because of the lack of supervision and vigilance of motorized vehicle owners and the lack of a security system for motorized vehicles. Meanwhile, incidents of burglary often occur on streets that tend to be deserted, acts of robbery are carried out by forcibly stopping motorists by threatening to be injured and displaying sharp weapons. To minimize the theft and theft of motorized vehicles, researchers created a motorized vehicle security system using SMS with an Arduino Uno-based GPS tracking method. A system that utilizes the SMS (Short Message Service) and GPS (Global Positioning System) features found on smartphones. This system can disconnect and connect the contact switch current on motorized vehicles using SMS which will then give orders to the relay. In addition, this system can find out the coordinates that can be directly tracked via a smartphone where the vehicle's position is when the motorbike is stolen or lost. From the tests that have been carried out, this system has worked well, all components of the tool work according to their respective functions. There are no problems with all components of the device (Arduino Uno, GPS Ublox Neo 6M, GPRS SIM 900A, and Relay).*

***Keywords:*** motorcycle, motor vehicle, security system, SMS, GPS, relay, tracking