ABSTRACT

The process of sending an item in the industry can sometimes take a very long time because of the distance. Many obstacles to be faced when shipping an item that is in the industry. One of the obstacles faced by, among others, the theft of the goods shipped. Theft of goods in delivering process is sometimes unknown the quantity of goods as well as the current position of the item stolen.

Therefore created a system that is intended as a payload weight monitoring and monitoring the position of the vehicle. The system consists of several components: power supply, loadcell sensors, op-amps, microcontroller, RS232, as well as GPS. +5 Volt power supply will be connected to a load cell sensor and a GPS. Loadcell connected to the op-amp circuit before connecting to the microcontroller. While the GPS will be directly connected to the microcontroller. Then from out of loadcell and GPS are included into the microcontroller will be forwarded to the RS232 circuit to be connected to the modem (transmitter). of the modem (transmitter) will be connected to the modem (receiver) to be displayed to Delphi.

After going through the testing process, the data obtained is for loadcell has an error of 0.2%, meaning that for 1volt value out of 1Kg, while the GPS data obtained while testing has an error of 0.002% for the latitude and longitude for experiencing an error of 0.004%.

Keywords: GPS, Loadcell, Microcontroller, Atmega16, SMS Gateway, Op-Amp
Halaman ini sengaja dikosongkan