

## ABSTRACT

Indonesia is one of the countries with minimal oil reserves, modern times we often encounter the theft of fuel in Pertamina Tank Trucks by irresponsible people, throughout Bandung there are at least 93 gas stations, every gas station is at least one delivery with a capacity of 16 KL, Every day the stolen fuel can reach 20-50 liters, the mode carried out by the driver, for example, pretending to stop and fill the wind in the garage or buy food in the stall. In that place, the driver and his trailer steal BBM by opening the seal on the valve Bottom loader

To that end, the authors designed a system of fuel truck taps using Limit Switch sensors that will detect the opening of the Raspberry Pi-based fuel tap valves, In addition to the Limit switch sensor there is also a GPS which is also used as a notification of truck positions, latitude and longitude and the time of occurrence, this system used to monitor real-time and precise fuel truck monitoring and display through the website, so the effort to remove the seals on the valve can be detected.

The application of the BBM truck monitoring system has been proven to help information processing the distribution of BBM from the Pertamina depot to the gas station. The average Delay is 1.39 seconds for the process from sensor to web, while data usage uploads an average of 0.1907 Kb per shipment. While the GPS process to the database gets an average of 4.89 seconds Delay, with an average usage data of 14.845 Kb. So that it is able to provide a Monitoring System in real-time

**Keyword:** *Raspberry Pi, Limit Switch, GPS, Real-time, Website*