

# When Every Fuel Drop Counts...



## FuelLog™ - An Automatic Refueling Control System no Human Intervention!

Whether installed in a Gas Station, on a Mobile Tanker etc., FuelLog™ is an automatic, fully wireless, RF (Radio Frequency) based, Fuel Pump control system that helps fleet managers effectively track mileage, fuel consumption and dispensing. FuelLog records operators and fuel pump activities while preventing unauthorized use. FuelLog is an easy-to-install device. It eliminates underground cables and wiring thereby reducing installation time by up to 80%. Automatic refueling could be authorized using RF-ID Coils, Numeric Key Pad, Magnetic Strip or a Smart Chip Key.



### What can FuelLog do for you?

- Cut fuel consumption by up to 25%
- Provide unattended yet secured access to refueling processes
- Physically guarantee that fuel is dispensed to authorized vehicles and drivers
- Eliminate spillage by cutting off fuel flow whenever nozzle is removed from the authorized vehicle or fuel tank
- Speed up fueling
- Automatically record and reconcile fuel consumption
- When integrated with FleetLog, Smartlog or SmartMile, improve fleet performance and reduce down time through accurate preventive maintenance



### Where Used?

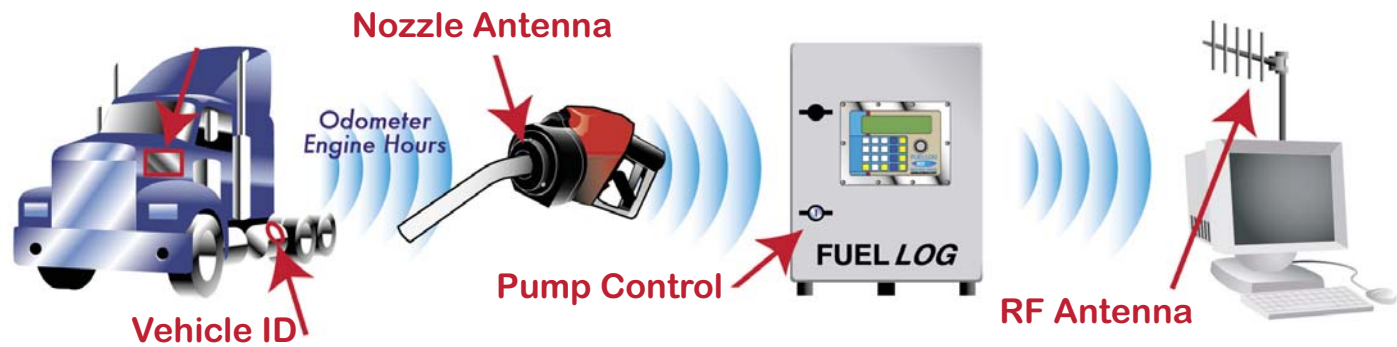
Private Fueling Facilities (Fuel Yards) of Truck fleets or other type of vehicles (e.g. Fork Lifts, Generators etc.) who need to privately fuel their fleets



Onsite Mobile Tankers and Oil Jobbers sending tank trucks to customer locations and fueling their vehicles for them or providing bulk deliveries of fuel to service stations



## System Architecture & Operation:



The Pump Control Unit controls each pump hose independently. It collects the vehicle data from the Vehicle Identification Unit via the Hose Control Unit. Communication between the Pump Control Unit and the Fuel Management Computer occurs at the completion of each transaction.

Authorization list (vehicles & drivers) can be updated from the Fuel Management Computer to the Pump Control Unit utilizing a radio frequency network.

The Pump Control Unit is designed in a manner that allows replacement with a new unit in thirty minutes or less. It is designed in such a way that in the event of a failure, the operator can fully recover and extract stored fuel transactions without the need to ship the Pump Control Unit to the manufacturer.

## Hardware:

- A Pump Control Unit (PCU) is installed on each fuel pump.
- A Hose Control Unit is installed on each fuel nozzle.
- A Vehicle Identification Unit (VIU) is installed on each authorized vehicle.
- RF Receiving Antenna is installed at each fuel location office.
- RF Transmitting Antenna is installed inside the Pump Control Unit.

## Vehicle Identification Unit

The Vehicle Identification Unit is installed on each authorized vehicle. It has a built-in pre-programmed chip containing a unique ID number, eliminating the need for a costly programming unit.



Whenever the fuel hose is inserted into the vehicle, the Hose Control Unit transmits the vehicle ID to the Pump Control Unit via wireless communication to obtain authorization before allowing fuel to be dispensed.

## Hose Control Unit

The Hose Control Unit is a compact device built to withstand any environmental condition common to petroleum handling equipment. It is designed for direct attachment to the hose nozzle in a manner that will not interfere with the dispensing fuel.



The Hose Control Unit is installed on each individual pump and detects the insertion of the fuel nozzle into the fuel inlet of a vehicle equipped with a Vehicle Identification Unit. The removal of the nozzle from the vehicle fuel inlet immediately terminates fuel flow.