

# FuelForce's EasyFuel: Vehicle Tag and Odometer Solution

## EasyFuel Vehicle Tag, Nozzle ID, & Fuel Controller Interface Background

### EasyFuel Vehicle Tag

The Vehicle Tag is a “contactless microprocessor-based smart card” that is installed in the fleet vehicle and identifies the vehicle to the Site Controller, providing vehicle identification and fuel type, as well as billing and payment information. Odometer readings are electronically collected automatically by the vehicle tag and transmitted to the Fuel Controller at the time of refueling. Vehicle Smart Tags have three components; the microprocessor-based tag, the fuel inlet antenna, and the window antenna.



Information that can be stored on the vehicle tag includes:

- registration and VIN or personal account number,
- fuel grade and permissible volume,
- minimum distance between refueling, and
- incremental odometer reading.

Date, time and odometer reading at last refueling are written to the tag. In addition, remote tag programming ensures easy, fast, and secure enrollment of vehicle tags to the system as the information can be downloaded from the central computer to the tags themselves. Vehicle Tags can be issued with or without odometer connections. Information is gathered from the vehicle tag itself, creating a seamless and user-friendly operation.

Since the vehicle tag is based on a microprocessor smart card, information can be downloaded to the tag, thus enabling future uses for the tag such as storing the vehicle's maintenance log and service records, and more.

It should be noted that while power is derived from the vehicle power system, the current utilized is so low that the operation of the vehicle is not affected in any manner. In addition, the system does not exhibit any radio frequency interference (RFI) or electromagnetic interference (EMI). Data retention is guaranteed for 10 years after refresh, and disconnecting the power supply from the tag does not affect stored data. In addition, the tag is rated for at least 1 million read/write cycles.

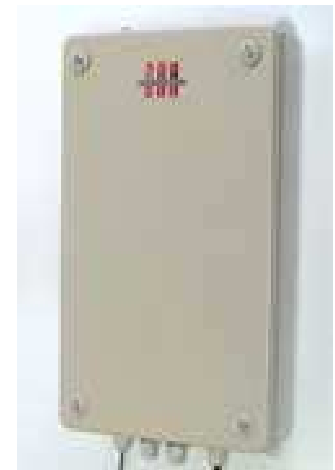
## Nozzle Tag ID Unit

The nozzle tag ID unit is a wireless device that slips over the nozzle spout, with a protective plastic nozzle cover. It contains the address of the nozzle and identifies the nozzle to the system. No adaptations to the nozzle have to be made, there are no wires, swivels, etc. This makes the system very robust and easy to install. Only when the correct type fuel nozzle is inserted in the fuel tank inlet will the authorization be approved and fuel dispensed into the vehicle.



## EasyFuel Fuel Controller Interface

The EasyFuel Site Controller is located inside the Fuel Controller. The Site Controller is connected to a site antenna which wirelessly receives the information from vehicle and driver tags. The site controller supports the entire EasyFuel system, receiving payment information from the vehicle and driver tags and transmitting it to the Fuel Controller. The Fuel Controller authorizes the refueling and activates the dispenser. The Site Controller also has the ability to write additional data to the vehicle and driver tags, including system updates and new applications. Communication is encrypted and secured through multiple methods to confirm data integrity, avoid data corruption, and ensure data confidentiality.



Contact your FuelForce Representative today for more details on how an EasyFuel Vehicle Tag and Odometer solution can improve productivity and simplify your fueling operations.