



EMS

Fuel Management

*Wireless
Automatic
Refueling*



Future of Service

*Where Innovation
Meets Function*

Version 1.00 August 2012



3G Wireless System Overview

EMS Provides **Fast, Reliable & Secure** *Wireless Automatic Refueling System* (WARS) for refilling service stations. It is the most **stable & flexible Wireless** system available in the market.

The system supports continuous, real-time fuel management over virtually any communication platform, which provides better accountability and system security.

The system can be implemented on any forecourt management solution it can easily adopt any integration to any forecourt controller.

Wireless Automatic Refueling System is a complete **Wireless** solution based on *Radio Frequency Identification Technology* (RFID).

3G Wireless System

Hardware of the 3G system is divided to two main parts, the vehicle components and the station component. See figure 1.

1) Vehicle Components

✓ *Vehicle Identification Device (VID)*

A passive RFID unit connected to ring antenna installed around the vehicle's fuel inlet. This new design extends us with anti-thief VID.

✓ *Odometer*

A wireless mileage unit installed in the vehicle sends the vehicle mileage readings wireless to back office processing application. It is Applicable with all types of vehicles.

Fueling Division

Automatic Refueling

*Fast
Reliable
&
Secure*

Overview

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2) Station Components

✓ WAF (Wireless Automated fueling receiver)

A Wireless Automated Receiver installed in the station. It receives all the data coming from vehicle units. A modern design can be installed at any place in any station and looks like a surveillance camera. There is a special communication adapter to connect the receiver by Ethernet cable.

✓ Wireless Nozzle reader

It is a small reader installed at each pump nozzle. It reads the ID of any vehicle component and sends it to back office through WAF unit.

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Components

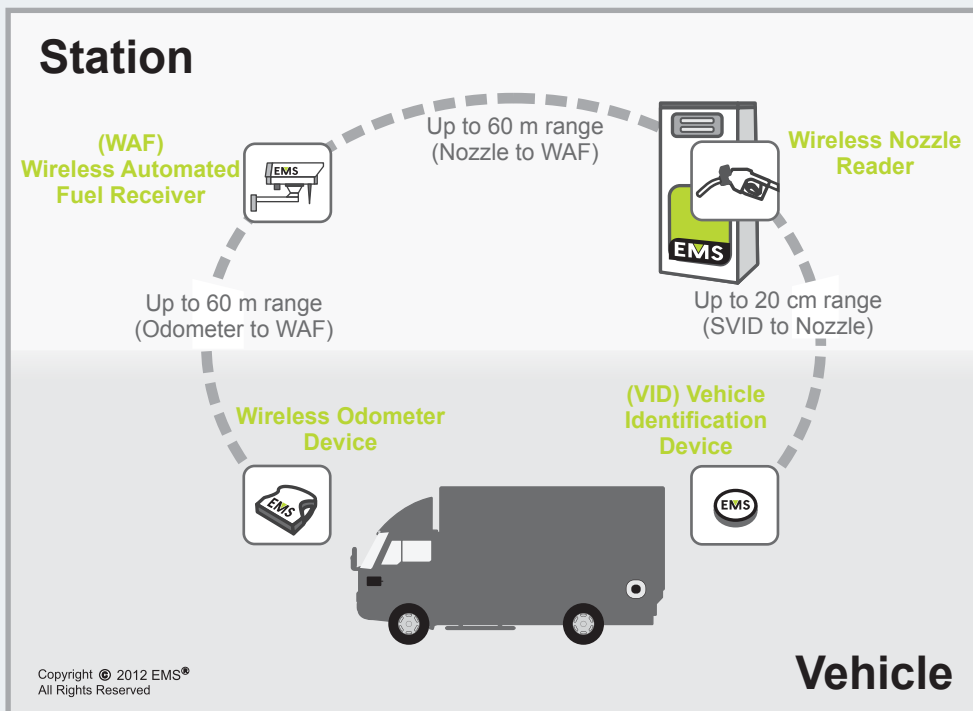


Figure 1: Wireless system components.

Note: The system equipment has been tested and found to comply with the limits for class B digital devices, pursuant to part 15 of the FCC rules, which provides reasonable protection against harmful interference in residential areas.

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How 3G works

A vehicle with its VID and Odometer enters a station where the wireless system installed. A nozzle with its reader inserted into vehicle tank fuel inlet. Communication started and vehicle ID sent to back office controller and waits for confirmation. After checking the database to see the validity of this ID and the allowed quantity to fill a confirmation is granted. The back office controller opens a transaction and the dispenser starts refueling. All of this process happens in a time less than 2 seconds if all recommendations are followed up exactly. Figure 2 shows detailed step by step refueling process.

Main Features of 3G System

- ✓ Vehicle authentication happens automatically through wireless communications.
- ✓ Security protocols are available to ensure the right fuel goes to the right vehicle.
- ✓ It is an ideal solution for unattended refueling.
- ✓ All transaction can be traced on the database.

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How It Works !

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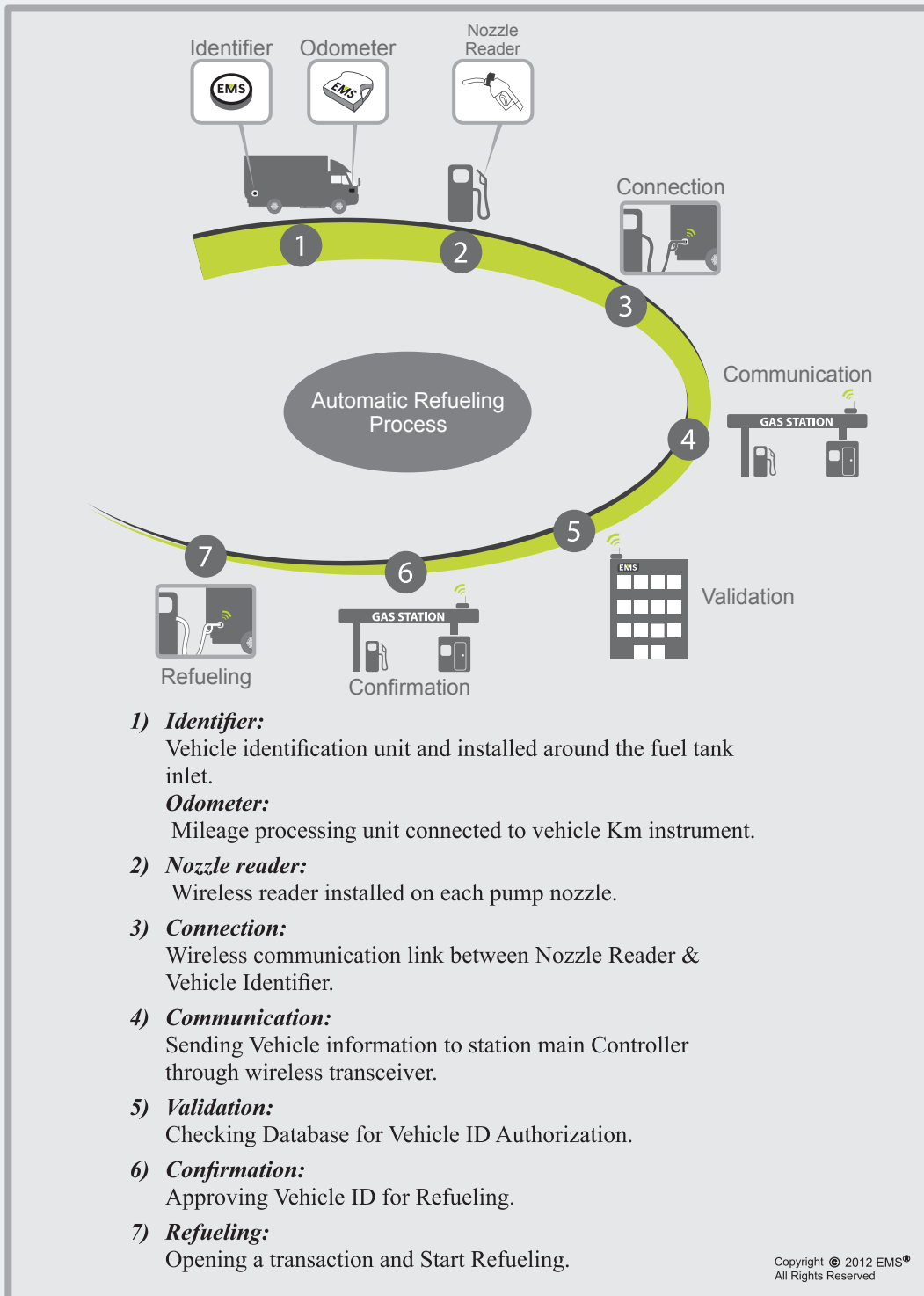


Figure 2: 3G wireless refueling process.

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Main Retail service station Benefits:

- ✓ Increases fuel sales
- ✓ Increases additional product and services sales
- ✓ Boosts loyalty of private & fleet clients
- ✓ Long-term fuel contract with fleets
- ✓ Secure fueling to customers
- ✓ Increases Dealers loyalty
- ✓ Increases market share
- ✓ Increases station throughput
- ✓ Eliminates the need for credit cards, vouchers or checks
- ✓ Faster improved service requires less service attendants.

Main Home service station Benefits:

- ✓ Improve accountability for consumable assets
- ✓ Lower overall fuel expenditures
- ✓ Reduce "shrinkage" (waste and abuse) through automated fuel dispensing
- ✓ Enhance safety through monitoring of fuel storage tanks and pumps
- ✓ Address environmental concerns
- ✓ Eliminate duplicate data entry and redundant data
- ✓ Provide timely fuel consumption data
- ✓ Shorten fueling time and increase productivity

Main fleet owners Benefits:

- ✓ Provides fuel consumption control
- ✓ Refueling authorized fleet vehicles only
- ✓ Prevents fuel fraud (anti-theft)
- ✓ Efficient use of time/ manpower and accurate accounting
- ✓ Delivers a full report system for vehicle use and consumption
- ✓ Provides effective maintenance scheduling
- ✓ Eliminates the need for credit cards, vouchers or checks

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Advantages

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The logo for EMS, featuring the letters 'EMS' in a bold, white, sans-serif font. The letters are set against a black, rounded rectangular background. The 'E' and 'M' are connected, and the 'S' is slightly separated. The logo is positioned in the upper left corner of the page, which has a light green background.

EMS

We are committed to lead the way to push the boundaries of delivering the most integrated and innovative solutions to our clients need to evolve, to become radically more efficient and to stay ahead in a competitive market.

Our Function Leads to Successful Innovation!