

# RFID Vehicle Identification



# Automatic Vehicle Identification

Our RFID vehicle identification system **automatically recognizes vehicles** and their fueling preferences, ensuring accurate reporting, preventing fuel theft, simplify refueling process and enabling efficient fleet management.

Upgrade to VIOTYS cutting-edge RFID identification system for streamlined, secure refueling.



## Fuel Economy

Prevent theft and eliminate attempts to transfer fuel into canisters



## Auto-identification

Automate vehicle identification seamlessly during the refueling process



## Fast service

Simplify refueling process and expedite service



## Easy to use

Simple and intuitive, akin to standard refueling



## Secure

Reliably mountable vehicle RFID tag design



## Industrial

Robust weatherproof nozzle reader design



## Fuel Economy

Prevent theft and eliminate attempts to transfer fuel into canisters

**VIOTYS**



## Wireless Station Receiver

INPUT VOLTAGE : **9-36 VDC**

BLUETOOTH : **BLE 5.1**

WORKING DISTANCE : **100 meters**

RS 485 : **Yes**

BUZZER : **Yes**

RELAY OUT : **1 pcs**

WORKING TEMPERATURE : **-40 to +65 C**

BUILT-IN BATTERY : **1000 mAh**

RF FREQUENCY : **433 Mhz / 2.4 Ghz**

RS 232 : **Yes**

DIMENSIONS : **80 × 50 × 20 mm**

INDICATOR : **3 pcs LED indicators**

PROTECTION: **IP 66**

WEIGHT : **0.35 kg**

## RFID Nozzle Reader

BATTERY VOLTAGE : **3.6 VDC**

DIMENSIONS : **55 × 50 × 45 mm**

TAG READING DISTANCE : **> 10 cm**

NOZZLE POSITION SENSON : **Yes**

ACCELEROMETER : **Yes, 3 axis sensor**

WORKING TEMPERATURE : **-40 to +80C**

INDICATOR : **LED (low battery, tag reading, BLE)**

TAG FREQUENCY : **UHF, EM or Mifare**

RF FREQUENCY : **BLE**

WORKING DISTANCE : **100 meters**

MAGNET SENSOR : **Yes**

BLUETOOTH : **BLE 5.0**

PROTECTION : **IP 67**

WEIGHT : **0.35 kg**

BUILT-IN BATTERY : **Li-SOCL2 9000 mAh**



## UHF Vehicle TAG

FREQUENCY : **UHF 860-930 MHz (EPC Class 1 Gen2v2)**

DIMENSIONS : **80 × 50 × 20 mm**

PROTECTION: **IP68 (Submersion proof to 3000m depth)**

WORKING TEMPERATURE : **-40 °C to +85 °C**

REAT DISTANCE : **> 10 cm**

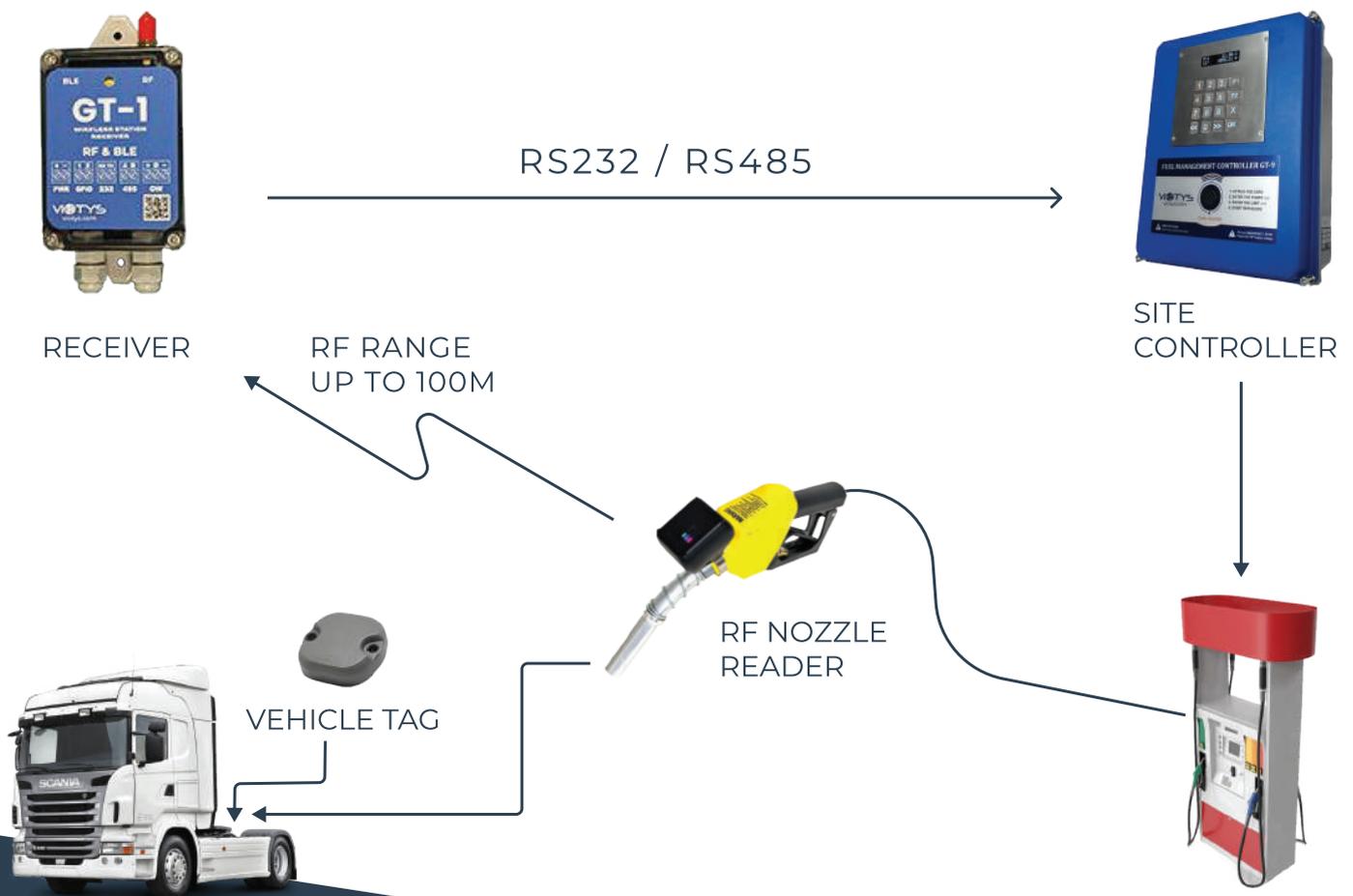
WEIGHT : **25.6 g**

MATERIAL : **ABS, Optimizedfor metal**

# How it works?

When the driver inserts the fuel nozzle into the vehicle's fuel tank inlet, the wireless nozzle reader detects and sends the tag ID to the Wireless receiver. Subsequently, the nozzle ID and TAG ID data are transmitted to the site controller via the RS232/RS485 interface.

If the RFID tag ID is in the whitelist, a transaction is automatically initiated, and refueling begins within the established limit. In the event the nozzle reader stops reading the tag, the refueling process immediately halts. This ensures the prevention of any attempts to remove the fuel nozzle from the tank, such as for refueling a canister.



## Solution is used across many industries

The proposed system is flexible and versatile. It can be used in construction, agriculture, mining and many other industries. If your company has its own gas stations or mobile tankers, **the wireless RFID identification system will certainly be useful to you.**

