

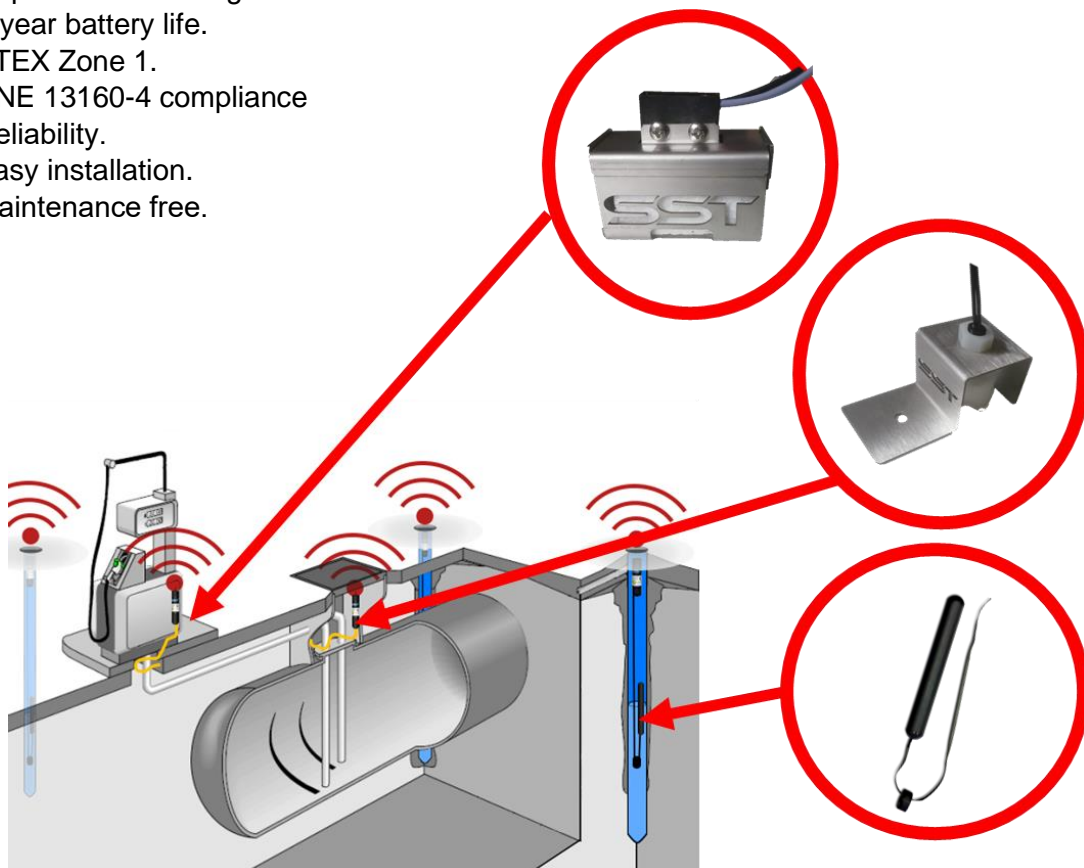
WIRELESS LEAK MONITORING IN PETROL STATIONS

The Smart Sensor Technology Leak Detection System provides environmental protection 24 hours a day, complying with UNE 13160-4 thanks to its revolutionary devices. Our customers can forget about leaks and concentrate on their business, being sure that their **manhole**, **dispenser bucket** or **ground water** of their facilities is not being affected by hydrocarbons.

The sensor detects the presence of hydrocarbon in free phase and activates an alarm that can be, local (audible and visual alarm) or remote (sending email alarm). Thanks to its modular design, the SST leak detection system adapts to a wide variety of situations, covering the needs of our customers.

Features

- Manhole, dispenser bucket, monitoring wells.
- Physical-chemical detection sensors.
- Radio frequency communication system.
- Smart switchboard.
- Possibility of sending data to the cloud or maintaining the local solution.
- Replaceable cartridges.
- 7-year battery life.
- ATEX Zone 1.
- UNE 13160-4 compliance
- Reliability.
- Easy installation.
- Maintenance free.



Sensor for monitoring wells

Detection device. It floats in the groundwater of the monitoring wells and activates the alarm when it detects a leak. It is suitable for wells 2" and up and has a replaceable cartridge that allows reuse once it detects a leak. It does not need civil works for the installation nor maintenance.

The reaction time is less than 2 minutes for 1 cm thickness of gasoline. For Diesel and Jet Fuel, it reacts more slowly, and may take several hours.

Two options are available:

- ✓ **WS01:** Does not activate an alarm if there is no water in the well. This sensor does not comply with UNE EN-13160-4. For 2" well and up.
- ✓ **WS02:** It has a water level sensor incorporated. In case water level goes below a certain level, alarm will be triggered. The sensor cannot discriminate alarm for low water level or contamination, therefore is recommended for sites where water will always be present in the well. This sensor complies with UNE EN 13160-4. For 2" well and up.
- ✓ **WS03:** it has two slotted housing. One contains the replaceable cartridge (detect hydrocarbon) and the second one contains two water level sensors (detects water level). WS03 needs to be used with two emitters (one for hydrocarbon and one for liquid level). Complies with UNE EN 13160-6. For 4" well and up.



Dimensions	WS01 & WS02 40mm X 510mm WS03 80 mm x 510 mm
Protection	IP 68
Cable length	10 mts
Detection	Physical Chemical Reaction
Cartridge	Internal Replaceable Cartridge
Reaction	Free phase HC (Gasoline and Diesel)

Liquid sensor

Liquid level sensor (hydrocarbons or water). Detects the appearance of liquids for height greater than 2 cm. The alarm is deactivated when the liquid level drops. Dimensions 3.5 x 3.5 x 7.5.

Complies with UNE EN 13160-4



Hydrocarbon sensor

Detects the presence of gasoline, diesel, jet fuel or solvents. Upon contact, they degrade the membrane and activate the sensor. Replaceable membrane. Dimensions 3 x 4 x 2 cm. The reaction time is less than 2 minutes for 1 cm thickness of gasoline. For Diesel and Jet Fuel, it reacts more slowly, and may take several hours. This sensor does not comply with UNE 13160-4.



RF Communication Device

Radiofrequency communication module that reads sensor information and forwards it to the gateway. 7-year battery lasting robust device, with ATEX Zone I and IP68 protection. It doesn't require maintenance nor civil works. "Plug and play" device with remote configuration. Distance covered (open air without obstacles) 1 km. It can use up to three repeaters to expand signal. Communicates in the free bands 868 MHz (for Europe).

Dimensions	98mm X 37mm X 45mm
Protection	ATEX Zone I
Battery	3.6 V Li. (7 years lasting)
Civil work	Not needed
Communication	RF Signal 868 MHz
Transmission period	Fully configurable
Data reading	Sensor status



Gateway

The Smart Sensor Technology Gateway receives the information from the sensors (directly or through repeaters) and manage it. You can use the gateway only in "Local" or also activate the transmission of data through internet to have e-mail alarms and remote visualization and configuration.

Relay output and possibility to connect to a modem via Wi-Fi or ethernet.

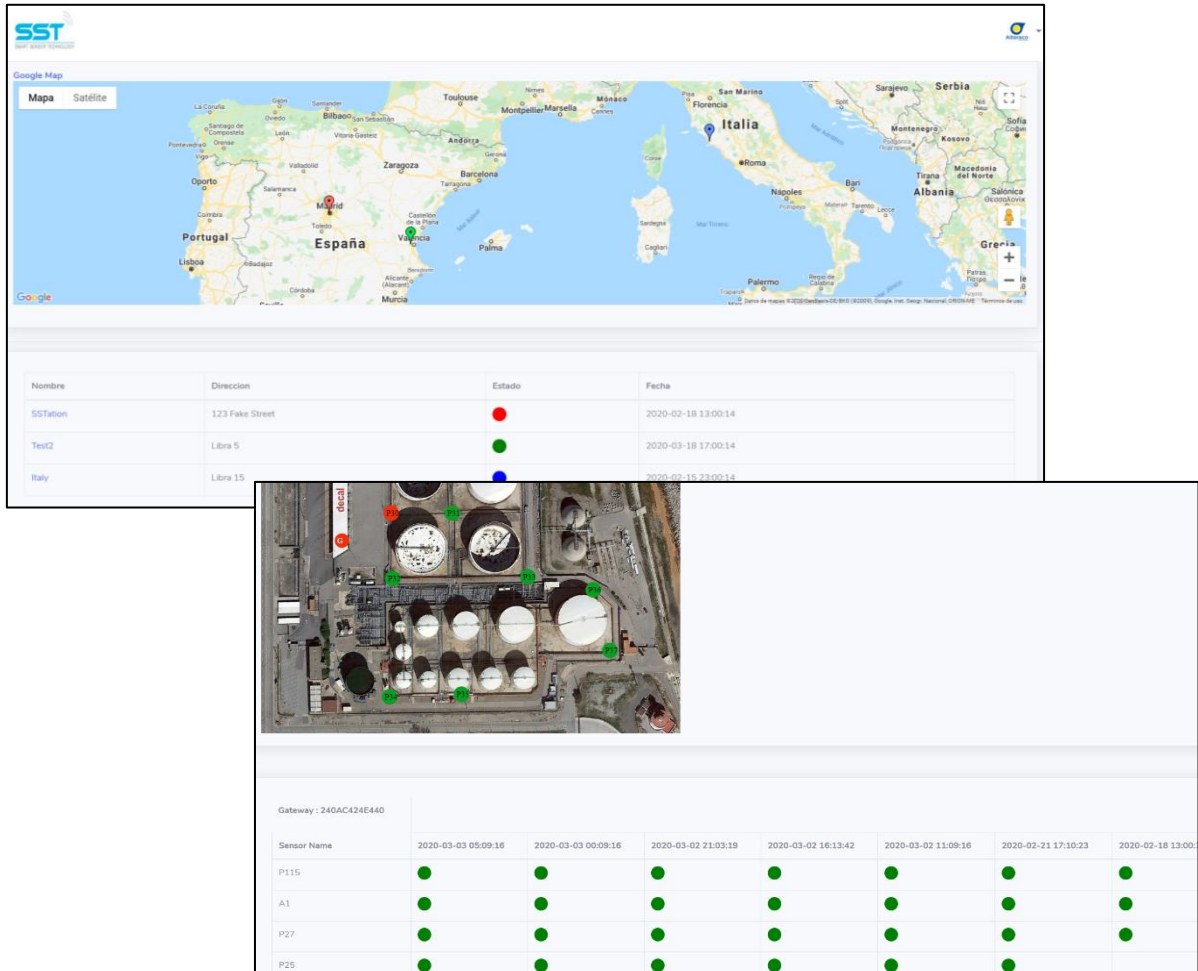
Sound and light warning of contamination indicating the contaminated sensor. Illuminated warning of communication problems between devices

Dimension	80mm x 80mm x 80mm
Readings	Total programable
Communication	868 MHz, 25mW, or 500 mW
Power	5 V
Consumption	3 W



Software

Gateway allows to send the information through internet for visualization in our SaaS software. It provides alarm notifications by e-mails as well as reconfiguration of the settings remotely.



Nombre	Direccion	Estado	Fecha
SSTation	123 Fake Street	●	2020-02-18 13:00:14
Test2	Libra 5	●	2020-03-18 17:00:14
Italy	Libra 15	●	2020-02-18 13:00:14

Sensor Name	2020-03-03 05:09:16	2020-03-03 00:09:16	2020-03-02 21:03:19	2020-03-02 16:13:42	2020-03-02 11:09:16	2020-02-21 17:10:23	2020-02-18 13:00:14
P115	●	●	●	●	●	●	●
A1	●	●	●	●	●	●	●
P27	●	●	●	●	●	●	●
P25	●	●	●	●	●	●	●