

Digitec™

Inspectra®

THE LASER METHANE DETECTOR

The DIGITEC™ INSPECTRA® Laser methane detection system is the next generation system developed by Gazomat for gas leak detection vehicles. The DIGITEC™ INSPECTRA® coupled with Gazomat's exclusive GPS mapping system increases the productivity, assurance and accuracy of your natural gas leak inspection surveys.

Leading technologies for unequalled performances

Improvements to this new methane leak detection system include :

- ◆ **Complete selectivity to methane.** Patented laser methane detection uses a High Tech laser diode tuned to a specific methane absorption wavelength. The extremely narrow width of the laser beam coupled with the precisely tuned wavelength of the laser diode provides the DIGITEC™ INSPECTRA® with complete selectivity to methane.
- ◆ **Less than 1 ppm sensitivity to methane.** Patented laser measurement technique adds system sensitivity that is less than one part per million (1 ppm).

The result of the combination of both technologies is system sensitivity and methane selectivity unequalled in the market today.

- ◆ **Network survey speed increased.** Unique electronics and innovative atmosphere sampling techniques allow a vehicle mounted system to perform at speeds up to 50 km per hour or 30 miles per hour during leak detection surveys. For distribution systems owners/operators or their contractors, this means a significant increase in productivity and a greater comfort of use for the survey teams.
- ◆ **Improved intrinsic security, reduced maintenance.** Elimination of the Flame Ionisation detector allowed removal of the hydrogen bottle.



The number of gas bottles to be managed is reduced to two (50 ppm CH₄ test gas and compressed air). Only one filter has to be regularly checked and replaced to ensure protection of the mirrors in the detection chamber.

Methane detection made simple

The detection equipment, composed of the laser detection chamber, system electronics and a laptop PC are safely installed on board of a survey vehicle. As the vehicle is driven, samples of the atmosphere are rapidly drawn into the system. Filters protect the detection chamber and its mirrors. Any methane present in the atmosphere sample will be displayed and recorded by the INSPECTRA™ system's on board PC.

This document is not binding on Gazomat

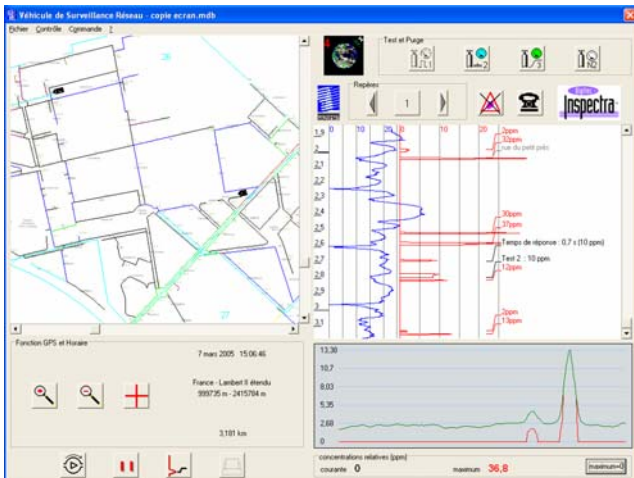
Total traceability of survey missions with the GPS option

When gas leaks are detected, their location can be plotted with pinpoint accuracy (longitude and latitude) with the GPS option, Gazomat's exclusive DIGITEC™ GPS mapping system. At the same time, the precise location of the DIGITEC™ INSPECTRA® vehicle is indicated on the digital map and recorded in the survey database to insure traceability.

With customer provided digital maps and a system's integrated GPS receiver, the DIGITEC™ INSPECTRA® can convert GPS longitude and latitude coordinates into map projection coordinates that conform to the accepted map or GPS projection standards of any particular country or region. Accuracy can be around the meter depending on weather and local terrain.

The DIGITEC™ INSPECTRA® software provides total traceability of the survey mission, with vehicle location, time and date data all stored in its access restricted files.

The DIGITEC™ INSPECTRA® leak detection vehicle with laser methane detection and on-board GPS and mapping system offers gas distribution and utility operators a reliable tool for timely, accurate and traceable gas leak detection surveys.



Unequaled performances

- ◆ **Absolute selectivity to methane:** Totally unaffected by other hydrocarbons, chemicals, water, etc. The DIGITEC™ INSPECTRA® detects methane only. False measurements are eliminated
- ◆ **Sensitivity to methane :** below 1 ppm
- ◆ **Network survey speed :** up to 50km/h
- ◆ **Stability of the system :** insensitive to temperature variances, vibrations and humidity
- ◆ **Powerful dedicated electronics**
- ◆ **Response time :** approx. 1.5 s
- ◆ **Start-up time :** 5 mn (turning-on and self-tests)
- ◆ **Total traceability of survey missions with GPS option :** (longitude and latitude coordinates) of each gas leak detected with date and time. Accuracy around the meter depending on weather and local terrain



For a rational and easy-to-use tool

- ◆ **Fully automatized monitoring of instrumentation :** Calibration, response time and gas line tests
- ◆ **Reduced maintenance with only 2 gas bottles to manage** (50 ppm CH₄ and compressed air) and 1 filter to regularly check and replace
- ◆ **Improved intrinsic safety of the equipment** with the elimination of the Flame Ionization Detector, H₂N₂ gas bottle and oxydizing furnace
- ◆ **Quick updating** of the system's files.
- ◆ **Access restricted files**
- ◆ **Smooth operation** insured with the laptop PC
- ◆ **Compact-design equipment** easy to adapt to any type of vehicles
- ◆ **On-board equipment protected** against traffic damage

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