REMOTE METHANE LEAK DETECTOR

RMLD

ENVIRONMETAL PROTECTION

ENERGY EFFICIENCY

OPERATING SECURITY

CDM PROJECTS

Asel-Tech

REMOTE METHANE LEAK DETECTOR

Asel-Tech RMLD

Revolutionary Technology

The Remote Methane Leak Detector and Locator is the safest, most accurate device in the global market for the remote detection and location of the presence of methane gas, indicating and pinpointing the leakage site.

The RMLD innovates the way methane inspections are carried out, as it is not necessary to be in the cloud generated by the gas leak to do the measurement. Additionally, it can quickly, safely and efficiently detect and pinpoint minimal methane leakages at a distance of up to 30 meters, allowing the user to safely inspect hard-to-reach areas, such as busy streets and avenues, in addition to restricted and confined areas in plants, facilities, buildings, and pipelines, etc.

The RMLD uses LASER technology that is capable of detecting traces of methane, i.e. low concentrations in parts per million x meter (PPM-M) at a distance of up to 30 meters form leak source. As such, it is the only device that is capable of finding leaks other technologies cannot detect. As it comes closer to the source of the leak, the instrument shows the increased concentration and transmits information to tell the operator exactly where the leak is coming from.

Because it is a small, light, and robust device, the RMLD is extremely portable, facilitating its usage in industrial plants, pipeline ranges and in the city.

Components

The RMLD consists in two interactive components:

- Laser transmitter/receptor;
- Signal processor/controller, which is the interface with the operator.

How does it work?

While crossing through a cloud of methane, the infrared laser energy is partially absorbed by the gas. This absorption is proportional to the amount of methane that is present. When the beam reaches a backdrop such as grass, bricks, pavement, fences, etc., it is reflected, sent back to the device, and captured by the receptor.

The attenuated beam is converted into an electrical signal that carries the information that is required to deduce the relative methane concentration. This signal is processed and the concentration can be reported in parts per million per meter (PPM-M). The laser allows measurements to be made at a maximum distance of 30 meters and since it is selective for methane, it will not trigger false alarms with other gases and hydrocarbons.

Technical Characteristics

- Laser-type measurement principle
- Range: 0-99.999 ppm-m
- Sensitivity: 5 ppm-m at a distance of up to 15 m; 10 ppm-m for at a distance of up to 10 m
- Detection alarms when above the values; adjustable form 0-255 ppm-m
- Indication on the display and via an audible tone
- Built-in self-test
- Laser detector IR: class I
- Operating temperature: -17°C to 50°C
- Certified for use in classified areas
- Power source: Rechargeable internal battery
- Carrying case, calibration kit and charger
- No consumables
- Light, compact and ergonomic.

Applications

SEH – Ideal for SEH professionals to perform inspections in industrial plants, confined environments, or in external pipelines before releasing a work order for periodic inspections of risk areas.

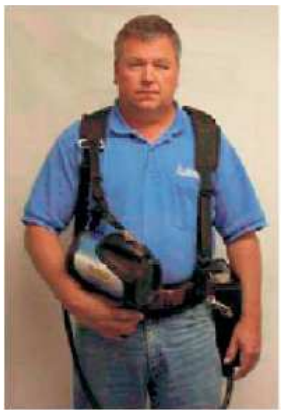
Environment – Identifies and pinpoints leaks of methane - one of the main gases that are responsible for global warming - to the environment, allowing immediate action to eliminate the problem. The equipment is indispensible in DI&M (Detection, Inspection, and Maintenance) services used in Clean Development Mechanism (CDM) projects.

NGV Refill Stations – The most recommended instrument to detect and pinpoint leaks after the gas distributor's measurement station, allowing constant leak monitoring in pipelines, dispensers, compressors, valves, gauges and connectors. It helps the NGV Refill Station owner to keep from paying for gas that is leaking to the environment.

Building Facilities – Ideal for hotels, condominiums, shopping centers, and any other facilities equipped with natural gas systems. Since the laser allows measurements to be made through gas windows, the RMLD is a fundamental tool for safety in confined spaces, preventing the risk of explosions.

Construction Sites and Engineering Services – Used as an inspection tool, during facility commissioning phases, the device allows cost reductions on account of inspection speed and reduced team mobilizations in the field.

Request a Demonstration



Ergonomic Carrying Kit

Indispensable for maintenance teams

Instrumentation – To detect leaks in gaskets and control and manual valve actuators, in flow gauges, and in safety and relief valves, etc.

Turbomachines – Fundamental to inspect compressor rooms and turbines that run on natural gas, both in closed and in open environments to detect leaks in turbine components and adjacent equipment.

Mechanics – Ideal to locate leaks in piping flanges and industrial devices such as heat exchangers, kilns, boilers, etc.

Pipelines – Allows for the detection of leaks in underground pipelines and offers accurate inspections of the entire section of the gas pipeline and its respective range.

Safe Measurement: up to 30 meters away from the leak

Equipment Inspection – Powerful tool not only to pinpoint spots of wear and tear in process equipment that may lead to natural gas leaks, but also to detect clouds and pockets of natural gas resulting from operating problems in the inspected devices.

Gas distributors – Ideal to check for leaks in residential and/or industrial facilities, to monitor the distribution network, and to pinpoint leaks during facility validation procedures.

Added Services (OPTIONAL)

Asel-Tech can render optional methane/natural gas leak detection & inspection (DI&M) services, including:

- Inspection of areas designated by the customer
- Issuing of reports pinpointing the Methane / Natural Gas leakage sites
- Instrument parameter calibration
- Measurement system parameterization and configuration
- Provision of training for equipment operation and RMLD configuration
- Labor: Specialized Aselco Tecnologia/Asel-Tech professional
- Monthly service-rendering agreement
- Equipment Rental




Asel-Tech Products

- Pipeline Leak Detection Systems
  - **Gases in General**
  - **Liquids in General**
  - **Multiphase Fluids**
- PIG location and tracking systems
- Distance natural gas leak detector
- Consultancy in corrosion assessment and corrosive process mitigation
- Pipeline anchoring equipment
- Cold pipe bending equipment
- Subsea pipeline leak detector

- **Services: Installation / Commissioning / Start-up / Maintenance / Projects / Equipment Rental**

Asel-Tech is a Brazilian company that focuses on the industrial and pipeline construction, assembly, operation, and automation areas, performing in the provision and rental of equipment and systems for the most diverse applications. We have consolidated our position in the Brazilian and international markets by developing technology and joint ventures with companies that lead their respective segments.

Asel-Tech

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