

# LaserMethane<sup>®</sup>

Detection at Distance

1m - 150m range

PPM sensitivity

Light and simple to use



Portable Products

# LaserMethane®

**A new era in methane detection has arrived.** Truly portable and handheld the LaserMethane® Detector (LMD) and LaserMethane® mini (LMm) offer users the ability to detect methane at distance. What once was a time consuming and resource draining procedure can now be completed in a fraction of the time by utilising the best in Tunable Diode Laser Absorption Spectroscopy (TDLAS).

**Detection at distance.** Current methods, eg FID, require users to be within arm's reach of the gas escape, and to position the detector into the gas cloud, often requiring scaffolding or special access equipment to reach the leak. In contrast the LaserMethane® products only need the emitted beam to pass through the cloud in order to detect methane. By simply pointing the laser beam towards the suspected leak, or along the survey line the handheld unit will monitor the levels of methane detected.

**Safety first.** Any gas escape brings with it a risk to the person detecting the leak. By detecting methane at distance the user can work well outside the danger zone. Gas is not the only danger however; the LaserMethane® products can safely be used to monitor gas pipes that run across rivers and roads as well as in high head room industrial and commercial property. Removing the operator from potentially hazardous and hard to reach areas reduces the risk of these situations.

## Typical applications include:

- Emergency call out
- Industrial and commercial property survey
- Gas plant
- Landfill monitoring
- Street survey
- Pipeline survey



FID in use



LMD in use



LMm in use

Designs that exceed your expectations.



## Technology

The LaserMethane<sup>®</sup> units transmit an infrared laser beam with a wavelength set to the unique absorption wavelength of methane. It then measures the light reflected back from the target behind the gas and determines the concentration of methane between the unit and the target from the amount of infra-red light that is absorbed.

The units are principally used to detect the presence of methane but they can also measure column density or concentration of the methane cloud in parts per million metres (ppm.m). Uniquely these LaserMethane<sup>®</sup> units have a built in methane chamber to enable calibration on start-up removing the need for costly external calibration.

The tuned laser diode reacts specifically to methane reading the level in the cloud, making these units key for both general survey and emergency call out situations.

## Product Highlights

The LMD offers full data and event logging with external interface and SD card. The LMM has ATEX approval allowing detection in hazardous areas.

## Resource and Time.

The LaserMethane<sup>®</sup> units offer companies the opportunity to save both manpower and man-hours. Examples include:

**Difficult to reach:** Pipe-work and accumulated gas clouds in the roof spaces of buildings are very typical in commercial and industrial property. The LaserMethane<sup>®</sup> products allow detection without the need for ladders, scaffolding or aerial work platforms.

**Pipeline Survey:** Historically pipelines have been surveyed on foot. By introducing the LMD, surveys can now be done from a vehicle reducing both the survey time and resource needed.

**Urban and Industrial pipe-work:** Gas pipes are often out of reach both in cities and on gas plants. LMD and LMM effectively locate escapes at height or difficult to reach areas such as inside conduits and across bridges.

### Local Distributor/Agent Details

## Gas Detection You Can Trust



Specification overview	LaserMethane® Detector	LaserMethane® mini
Weight	1.35kg (3lbs)	0.6kg (1.3lbs)
Dimensions	112 x 250 x 248mm (4.4 x 9.8 x 9.7")	70 x 179 x 42mm (2.7 x 7 x 1.7")
Detection Distance	Up to 30m standard mode Up to 150m in reflect mode with reflector	Up to 30m standard mode Up to 100m with reflector
Detection Speed	0.1 seconds	0.1 seconds
Detection Limits	100 - 10,000ppm.m	10 - 50,000ppm.m
Operating Time	1.5 hours minimum per charge	5 hours minimum per charge
Operating Temperature	0° - 40°C (32° - 104°F)	-17° - 50°C (1° - 122°F)
Ingress Protection	IP54	IP54
ATEX Approval	Not applicable	Ex II 2G Ex ib op-pr/op-is IIA T1

Further detailed specifications are available on request.  
Crowcon also offer a full range of fixed and portable solutions

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