

# LaserMethane® *mini* Gen2

## Methane Detection at a Distance



### LaserMethane® *mini* Gen2

The second generation LaserMethane® *mini* Gen2 from Crowcon is changing the way methane leaks can be detected.

Utilising laser technology, LaserMethane® *mini* Gen2 (LMm) allows users to reliably and accurately detect methane, at a safe distance.

Get results in seconds by simply pointing the laser beam towards the suspected leak, or along the survey line. This removes the need to access fenced-off, high level or other hard to reach areas.

#### **Safety First**

- Remote measurement and detection, up to 100 metres
- No specialist or special access equipment required to detect leaks
- ATEX approved for industrial use and now includes mining applications

#### **Easy to Use**

- Portable – truly hand-held
- Light weight, compact and robust design
- Intuitive menu
- Full colour numeric or graphical display

#### **Flexible and Convenient**

- User programmable alarm and offset levels
- Long battery life – allowing 6 hours of continuous operation from one battery
- Self-check and self-calibration at start-up, saves time and ensures consistent high performance and reliability

#### **Accuracy and Reliability**

- Responds specifically to methane
- Exceptional accuracy - detects even very low levels of methane
- Fast response time, typically 0.1 seconds



**HATECH**  
GASDETECTIETECHNIEK

LaserMethane® mini Gen2

Specification

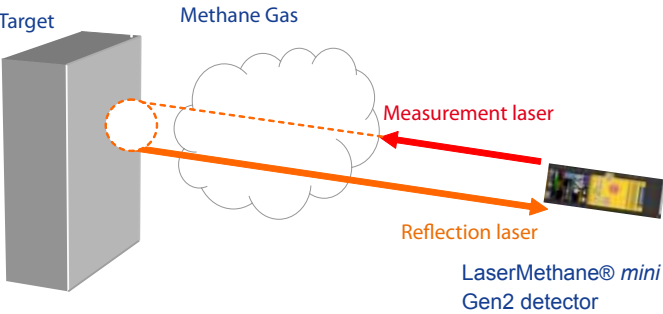
Crowcon's LaserMethane® mini Gen2 can accurately and reliably detect gas leaks from a distance. What was once a time and resource consuming activity can now be completed in seconds.

Measurement Principle

By pointing the LaserMethane® mini Gen2 at a suspected leak or survey area, such as a gas pipe or ceiling, the concentration of methane is measured by detecting the difference between the light emitted and the light received.

In order to achieve high detection sensitivity and selectivity for methane, LaserMethane® mini Gen2 uses a wavelength that both exhibits maximum adsorption and is unique to methane.

The methane column density is the concentration of methane between the detector and the target and is the product of the concentration of the methane cloud (ppm.m) and path length through the cloud (metres) and is reported in units of ppm.m.



Typical Applications

- Methane beyond reach i.e. difficult to reach or inaccessible areas
- Large area monitoring e.g. pipeline survey
- Hazardous area monitoring eg petrochemical refinery
- Secondary disaster prevention i.e. accumulated gas clouds in roof spaces of buildings in commercial and industrial property
- Methane detection through windows/letterbox of unoccupied property

Please refer to LaserMethane® application guide for more information.

Size	70 x 179 x 42mm, (2.8 x 7 x 1.6 inches) WxDxH
Weight	600g (1.3lbs), including battery
Target Gas	Methane (CH <sub>4</sub> )
Detection Method	Tuneable diode laser absorption spectroscopy (TDLAS)
Detection distance	30m standard mode Up to 100m with reflector
Measuring range	1 – 50,000 ppm.m (dependent on the reflecting object and detection distance)
Measuring accuracy	±10% @ 100 ppm.m (2m) ±10% @ 1000 ppm.m (2m)
Detection speed	0.1 seconds (approx)
Audible Alarm	72dB to 76dB @ 0.3m and dependent on angle
Reflect Warning	Insufficient reflect warning, audio and visual
Display	Full colour electro-luminescence display
Operation	Logical menu functions
Battery	Rechargeable nickel metal hydride
Operation time (laser on)	6 hours minimum per charge (4 hour recharge) at 25°C @ display level 5
Operating temperature	-17° to 50°C (1° to 122°F)
Operating humidity	30% to 90% RH
ATEX	<b>Main body:</b> Ex II 2G Ex ib op-pr/op-is IIA T1 Ex I M2 Ex ib op-pr/op-is IIA I  <b>Battery pack:</b> Ex II 2G Ex ib IIA T1 Ex I M2 Ex ib IIA I
Ingress Protection	IP54
CE	CE 0344
EMC	EN61326-1 : 2006
Laser Safety	IEC 60825-1 : 2001  <b>Marker laser :</b> Output wavelength 650 nm Output level: 1 mW (Class 2) or less  <b>Detection Laser:</b> Output wavelength 1653 nm Output level: 10 mW (Class 1) or less  <b>Caution! NEVER LOOK INTO THE LASER BEAM. Never point this detector towards the sun.</b>
Standard product supplied with	Battery charger Operator manual (English and Japanese as standard) Rechargeable battery Strap Protective boot
Optional Extras	Carry case Extra battery Laser enhancement glasses

Information included is correct at time of print and subject to change without notification. All information included is printed in accordance with the manufacturer.



Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below.



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Please note - Product designs and specifications are subject to change without notice. The user is responsible for determining the suitability of this product.