

Laser Methane mini-G – Laser type gas detector



TGE Tokyo Gas Engineering Co., Ltd.

Laser Methane mini (-G) – laser-type detector, capable of safely and quickly detecting gas leaks from a distance. The Laser Methane mini-G guarantees best visibility through green laser and capable to communicate with mobile devices!

The measurement principle of this equipment uses the characteristics of methane, which absorbs the laser beam (infrared rays) of a specific wavelength (infrared absorption technology). The laser beam

directed at targets such as gas piping, the ground, etc., will reflect back a diffused beam from the target. The device will receive the reflected beam and will measure the absorptivity of the beam, which will then be calculated into methane column density (ppm-m).

Two available versions:

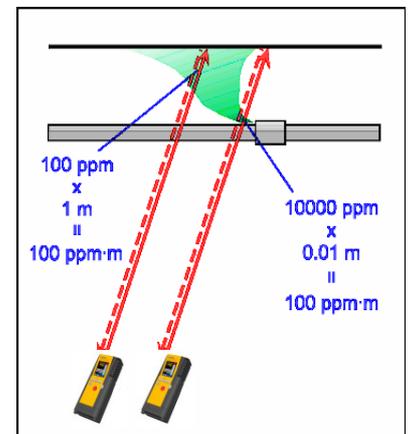
Laser Methane mini-G SA3C50A (green) – For non-explosive proof areas. Wireless communication is enabled when an exclusive application is installed on an Android device, which can then record the values measured by Laser Methane mini-G. In conjunction with the GPS function on the Android device you can view the measurement history and the measured locations on the map.

Laser Methane mini SA3C32A (yellow-orange) – Intrinsically Safe (ATEX Ex ib IIA TI). Can be used in the following hazardous areas: Zones 2 and 2 for city gas, coal mines etc.



A new era in portable methane detection has arrived. Truly portable offers the laser methane detector (LMD) and Laser Methane Mini-G (LMmG) users the ability to detect methane in the distance. What was once a time-consuming process is now done in a fraction of the time by using the best diode laser technology.

- Can detect faster than conventional method (detection speed 0.1 sec)
- Remote detection
- By simply pointing the laser beam towards the suspected leak or along the survey line
- Can detect through the window. Measurement of rooms filled with methane from outside



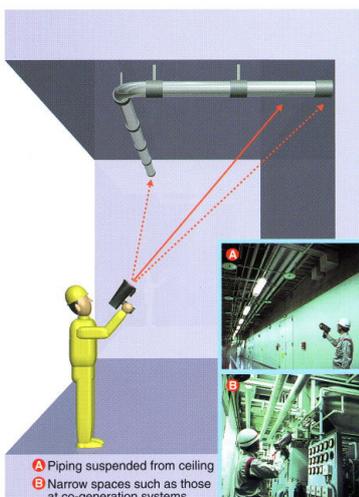
High durability and compact design. Solid, dust-proof and drip-proof construction for use in harsh environments. Superior portability for its small size with a long-lasting battery. Pocketable for work clothes and convenient for carrying. You can work easily with Laser Methane mini G even in cramped places or on a ladder. Continuous operation time over five hours: sufficient for a full day's work.

Only sensitive to methane, no false reports.

Target gas:	Methane (CH ₄) & methane-containing gases
Detection limits:	1 ~ 50000 ppm-x m
Accuracy of detection:	±10%
Measurement speed	0,1 sec
Detection distance	0,5 - 30 m; (0,5 - 100 m using an optional reflect sheet)
Power supply:	rechargeable Ni-MH battery
Continuous operation time	~4,5 -6 hours (at 25°C, and display level 5 incl. flashing guide light)
Laser safety class	Guide light: (green laser light: class 3R; Measurement light (infrared): class 1
Operating temperature range	-17 + 50 °C.
Dimensions and weight	Splash proof and dust proof structure 70 x 179 x 42 mm; 530 - 600 g (including battery)

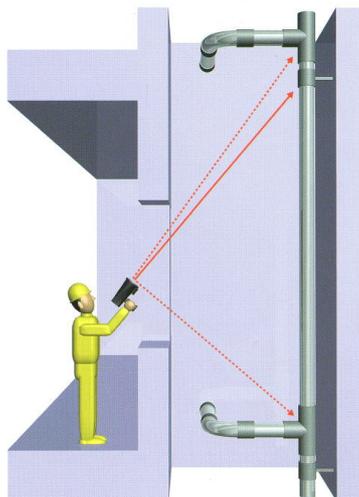
1 Piping suspended from ceiling Ceilings in plants, basements in buildings, etc.

It is possible to inspect this type of piping without using a stepladder.



2 Piping in pipe shaft Buildings, apartment houses, multiple dwelling houses, etc.

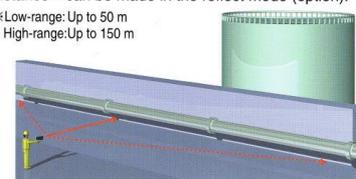
It is possible to inspect this type of piping without scaffolding.



3 Remote detection over a long distance Natural gas transmission pipe, etc.

If the pipe is coated with reflective paint or a reflector plate is set behind the pipe, remote detection over a long distance* can be made in the reflect mode (option).

*Low-range: Up to 50 m
High-range: Up to 150 m



4 Locked room Ordinary homes, etc.

Even in a house left empty with doors locked, detection is possible through a glass window.

