PERGAM-SUISSE AG We Invent to Prevent

Principle of measurement

Laser Methane is based on utilization of laser absorption spectrophotometer of methane gas for gas measurement. The system detects natural gas leaks by emitting a Laser at particular wavelengths and analyzing the light reflected back from the ground to determine how much was absorbed by the methane in the natural gas. The measured gas volume is expressed by the methane column density (ppm-m): methane density (ppm) multiplied by the thickness (m)



00 ppm x 2m = 200 ppm xmwith measured LMm called "Methane-Column Density" Concentration x Density

Difficult to reach areas

Accumulated gas clouds in commercial and industrial facilities are commonplace. The Laser Methane mini allows for detection removing the need for ladders, scaffolding or aerial platforms.

Additional technology features

- -> 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 room filled with methane from outside.
- -> Only sensitive to methane. No false reports.

Typical applications include

- -> Emergency response
- -> Industrial and commercial property surveys
- -> Gas processing plants
- -> Landfill monitoring
- -> Distribution pipeline surveys
- -> Transmission pipeline surveys
- -> Refinery surveys



^{•1} Minimum detectable sensitivity may depend on the reflector/reflecting object and detecting distance. *2 Warning label Subject to technical changes.

Please use this device to detect the target gases only. Gases other than the target gases cannot be detected by this device.

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Compact and Portable Methane Gas Detector





Laser-Methane mini

Laser Methane mini G

Laser Methane mini





General specification

Items	Specifications
Target Gas	Methane (CH4) & methane-containing gases
Detection limits	1 ~ 50,000 ppm x m
Accuray of detection	± 10 %
Detection distance	0.5 m ~ 30 m (0.5 m ~ 100 m using an optional reflect sheet)
Dimensions	70 (W) x 179 (D) x 42 (H) mm
Calibration	Self calibrating with integrated reference cell
Structure	Splash & Dust Proof (IP54)
Alarm	Audible & Visual

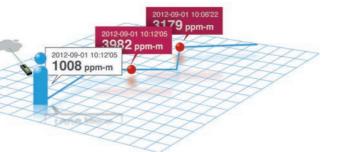
Specification SA3C50A

Items	Specifications SA3C50A	
Battery Life	Approx. 4.5 hours (at 25 °C, Display Level:5, Flashing Guide Light)	
Operating temperature	- 17 °C ~ + 50 °C	
Weight	530 g or less (including Ni-MH Battery Pack)	
Guide Laser Light Color	GREEN (Class 3R: 5 mW or below)	
Certificate	CE (R&TTE)	
Application	Indoor & Outdoors under strong sunshine	
Connection	Bluetooth & Internet Access (Android)	
Area of use	Non-Explosion proof area	

Interaction with Android mobile devices



- -> Realtime data display (measuring results)
- -> GPS data tracking
- -> Data storage for traceability
- -> Ability to capture and store images
- -> Email data transfer



Items Specifications SA3C32		
Battery Life	Approx. 6 hours (at 25 °C, Displa	
Operating temperature	- 17 °C ~ + 50 °C	
Weight	600 g or less (including Ni-MH Ba	
Guide Laser Light Color	RED (Class 2 : 1 mW or below)	
Certificate	CE (ATEX & EMC)	
Application	Indoor Hazardous Areas	
Connection	none	
Area of use	Explosion proof required area	

Features of the new Laser Methane mini

A new era in portable methane detection has arrived. Truly portable and handheld, the Laser Methane Detector (LMD) and Laser Methane mini (LMm) offers users the ability to detect methane remotely. What once was a time consuming and resource draining procedure can now be completed in a fraction of the time by utilizing the best in Tunable Diode Laser Absorption Spectroscopy (TDLAS).

Current methods such as FID, require users to be within arm's reach of a potential methane source, and to position the detector into the gas cloud, often requiring scaffolding or special access equipment to reach the area of interest. In stark contrast, the Laser Methane handhelds only need the emitted beam to pass through the gas cloud in order to detect methane. By simply pointing the laser beam towards a suspected leak, or along a survey line the handheld detector will monitor the level if methane is detected.





Specif	ication	SA3	C 32A

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