REMOTE LASER METHANE GAS DETECTOR

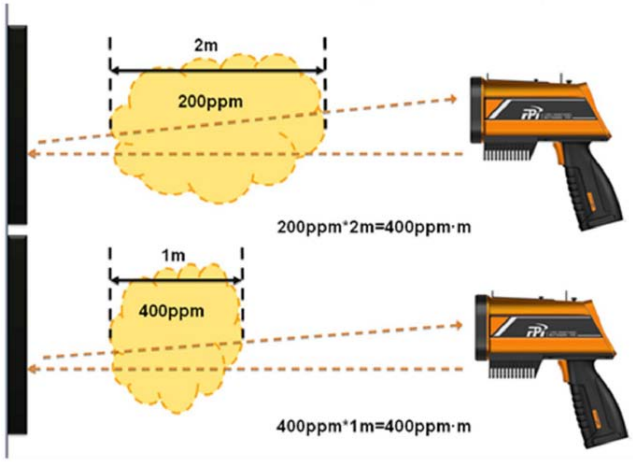
Tunable Diode Laser (TDLAS) based technology makes remote methane (natural gas) leak detection possible.

Easy to operate, instant response and built-in calibration function, providing ultimate convenience and accuracy

PRINCIPLE OF DETECTION

The RLGD-100 employs Tunable Diode Laser Adsorption Spectroscopy (TDLAS) technology, where laser light beam is projected over a distance onto a reflective target, a fraction of backscatter is reflected and received by the transceiver.

Methane in the laser path creates a distinct signal in the returned light, which will be collected and focused onto a detector and converted to an electronic signal. Average methane density between the detector and target is calculated and displayed in ppm·m.



KEY FEATURES

- Locate methane up to 30 meters away
- Ultra-fast response down to 0.1 s
- No cross interference from other gases
- Self-diagnostics and automatic calibration
- Easy to operate and maintenance free
- Continuous operation up to 8 hours
- Visual and audible alarms
- User-friendly LCD display
- Wireless data logging
- Lithium-ion battery

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TECHNICAL DATA

Detection Gas	Methane (CH4) or methane containing gases (natural gas)
Measurement Range	0 to 50,000 ppm·m
Detection Distance	0.5 to 30m nominal, actual detection distance may vary based on climatic conditions
Sensitivity	5 ppm ·m at distance from 0 to 10m
Accuracy	±10% (100 to 1,000) ppm·m
Response Time	0.1s
Alarm Range	1 to 9,999 ppm·m
Alarm Modes	Audible tone, visual flash and concentration reported on the display
Self-test & Calibration	Built-in self-test and automatic calibration before start-up
Laser Safety Class	In conformity with IEC60825-1.2007, a class 1 laser is equipped on this instrument as the detector and a class 2 or 3R laser used as the spotter
Hazardous Area	Ex ib IIA T3 Gb (IECEx certification pending)
Enclosure Protection	IP54
Operating Conditions	-20 to 50°C, 30 to 95% RH (non-condensing)
Power Supply	Rechargeable lithium-ion battery
Battery Duration	≥ 8h at 25°C under screen brightness level 3 and sound volume level 2
Battery Charging Time	≤ 4 hrs
Weight	< 1.5 kg

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