



# VEHICLE-BASED GAS LEAK DETECTION

## LEADERS IN GAS DETECTION

Since 1977

## SELMA Roof

### Features:

- Simple operation and data processing
- Detects leaks in front and to the side of the driving path
- Detection distance — up to 80 m
- Max velocity — 60 km/h
- Methane sensitivity — 5 ppm
- Installation on any type of vehicle

SELMA mini (Street Evaluating Laser Methane Assessment) is one of the most modern gas leak detector device. The main application is the Leak de-tECTION in gas pipelines, compressor stations and other potential sources of methane emissions. The principle of SELMA is a pulsating infrared laser.

**Roof:** infrared laser beam can directed on each item / location in a distance from up to 80 meters. If a methane cloud is crossing the laser beam at any point between the system and the re ection object the discharged amount is recognised and will be measured.



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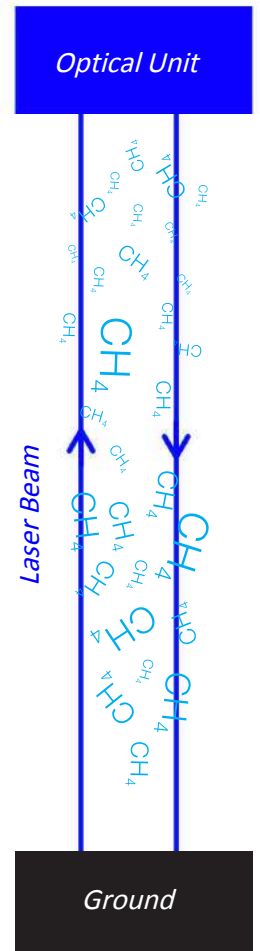
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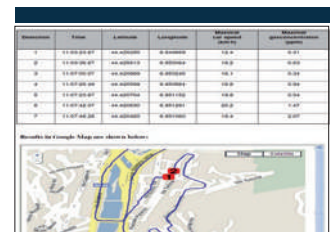
Sydney	Melbourne
Hobart	Adelaide
Auckland	Wellington

[www.controlequipment.com.au](http://www.controlequipment.com.au)

<b>Target Gas</b>	Methane (CH <sub>4</sub> ) and methane-containing gases (natural gas and similar)
<b>Sensitivity</b>	5 ppm×m (Roof System)
<b>Detection Range</b>	0 to 99999 ppm×m (Roof System)
<b>Detection Distance</b>	80 m (75% reflectivity)
<b>Response Time</b>	0.1 seconds (Roof System)
<b>Operating Temperature Range</b>	−10°C ... +50°C
<b>Pump Flowrate</b>	max 1080 l/h
<b>Target Position</b>	GPS coordinates
<b>Data Output</b>	Pergam Software
<b>Power Supply</b>	12 V
<b>Max Velocity</b>	60 km/h
<b>Measurement Time</b>	0.1 sec
<b>Laser Safety Class</b>	Guide light (green laser light): Class 3R Measurement light (infrared laser light): Class 1
<b>Dimensions</b>	197 (D) × 316 (H) mm (Roof System)
<b>Weight</b>	6.5 kg (Roof System)
<b>Rotation Angle</b>	Horizontal 360°   Vertical: 25° > +90°
<b>Video Camera</b>	Full HD (1920x1080)



Roof System



Pergam Software

## Principle of Remote Gas Detection

**SELMA** is based on the utilisation of laser absorption spectrophoto-meter of methane gas for gas measurement.

The system detects natural gas leaks by emitting a laser at a particular wavelength and analyzing the light reflection from an object to determine how much was absorbed by the methane in the natural gas.

The measured gas volume is expressed by methane column density (ppm × m): methane density (ppm) multiplied by laser length (m).