

RMLD

Sewerin RMLD

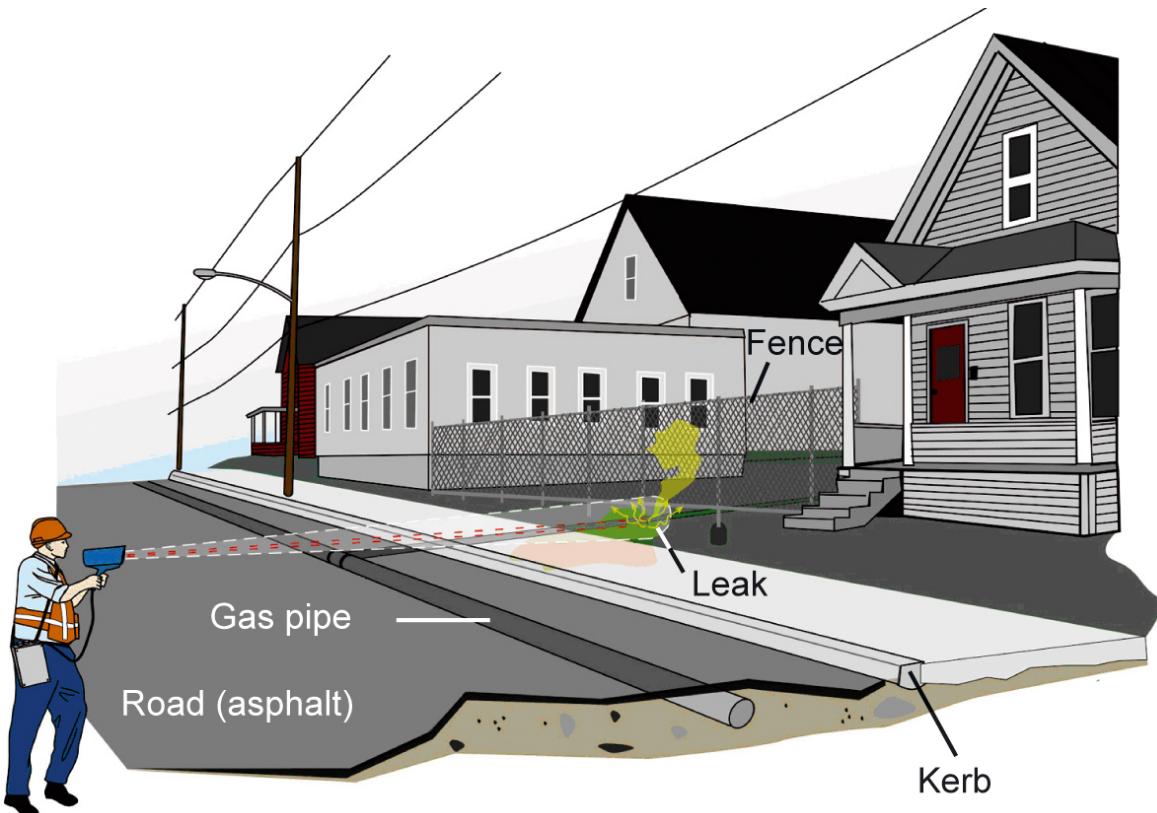
Revolutionary laser technique to check for gas leaks from a distance of up to 30 m



The Sewerin **RMLD** (Remote Methane Leak Detector) is the first instrument in a generation of laser leak detectors, allowing the user a completely new method of operation.

The **RMLD** provides access to hard-to-reach areas and difficult terrains. Its laser passes through a methane plume and absorbs a specific area of the infrared light, allowing the user to detect the gas leak from a safe distance.

The instrument is exclusively developed for detecting methane gas and shows no cross-sensitivity to other hydrocarbons. The gas concentration is calculated by the amount of infrared light that is absorbed by the gas. For example if the gas plume has an expansion of 1 m and a concentration of 100 ppm, a value of $100 \text{ ppm} \cdot \text{m}$ is displayed. If the gas plume of 100 ppm is only 0.5 m wide, the measured value is $50 \text{ ppm} \cdot \text{m}$.



The **RMLD** consists of two interactive components:

- Transceiver
- Controller



The transceiver has two lasers; the infrared laser is invisible and is continuously active while the unit is turned on. The spotter laser operates in the clearly visible green frequency range and can be activated on demand.

The **RMLD** includes integrated self-test and adjustment functions that guarantee correct functioning of the device. While in use, the **RMLD** continuously monitors several parameters to ensure that the instrument is functioning correctly. Should any of these parameters exceed the specified operating limits, an audible alarm will sound and a fault/warning error message will be shown on the display.

Technical Data

Detection method:	TDLAS (Tunable Diode Laser Absorption Spectroscopy)
Measurement range:	0 to 99,999 ppm*m
Sensitivity:	5 ppm*m at a distance of 0 to 15 m min. 10 ppm*m at a distance of 15 to 30 m
Detection range:	30 m (nominal) Actual distances may vary depending on the type of background and other conditions
Beam size:	Conical beam, width 56 cm at 30 m
Standards complied with:	EMV (EN61000-6-2, EN6100-6-4) (pending)
Laser safety (eye protection): (CDRH, ANSI und IEC)	IR detection laser: <ul style="list-style-type: none">• Class I Green spotter laser: <ul style="list-style-type: none">• Class IIIa: Class IIIa: Do not look into the beam or view directly using optical instruments!
Display:	LC display with backlight (0.75 inch, numeric)
Operating temperature:	-17 °C to +50 °C
Humidity:	5 to 95 % (non-condensing)
Housing:	IP54 (protected against water spray and dust)
Weight of device:	4 kg (transceiver 1.3 kg, controller 2.7 kg)
Carrying case:	6.4 kg; 86 cm x 24 cm x 36 cm
Power supply:	Internal lithium-ion rechargeable battery External backup battery pack holding 5 type "C" cells (optional)
Battery operating life:	8 hours at 0 °C without backlight on (internal battery)
Battery charger:	External universal charger 110 – 240 V/AC, 50/60 Hz with charge indicator (max. 8 hours for full charge)

Delivery contents

- RMLD (transceiver and controlle)
- Carrying case with integrated reference gas cell
- Charging adapter
- Headphones
- Carrying strap
- Ergonomic carrying system

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We are certified in accordance with EN ISO 9001

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