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

The SEWERIN RMLD-IS (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-IS 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 ppm*m is displayed. If the gas plume of 100 ppm is only 0.5 m wide, the measured value is 50 ppm*m.

The RMLD-IS consists of two interactive components, the transceiver and the 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-IS includes integrated self-test and adjustment functions that guarantee correct functioning of the device. While in use, the RMLD-IS 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.

Delivery contents

- RMLD-IS (transceiver and controller)
- Carrying case with integrated reference gas cell
- Charging adapter
- Headphones
- Carrying strap
- Ergonomic carrying system
### Technical Data

**Detection method:** TDLAS (Tunable Diode Laser Absorption Spectroscopy)

**Measurement range:** 0 – 99.999 ppm*m

**Sensitivity:** 5 ppm*m at a distance of 0 – 15 m  
min. 10 ppm*m at a distance of 15 – 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:**
- EN 61326-1
  - Conducted Emissions: Class A  April 21, 2005
  - Radiated Emissions: Class A  April 21, 2005
- FCC 47 CFR Part 15: Class A  April 21, 2005
- ANSI C63.4: Class A  April 21, 2005
- EN 61000-4-2: 4/8kV  April 20, 2005
- EN 61000-4-3: 10V/m  April 20, 2005

**Intrinsic Safety:** Class I, Division 1, Group D; T4  
UL 913, MetLab Listing #E112840

**Laser safety (eye protection):**
- IR-detection laser: Class I
- Green spotter laser: 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 – +50 °C

**Humidity:** 5 – 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)

**AC/DC adapter:** External adapter, 100 – 240 V~, 1.6 A, 50 – 60 Hz with charge indicator (max. 8 hours for full charge)

Please contact us for a comprehensive quote, including additional technical specifications and information on accessories 107304 – 03/2016  – Subject to technical changes.