Esders Laser Leak Indicator

ELLI

- Colored LCD touch screen
- Selective detection of methane
- Integrated GPS and bluetooth functionality
- User-defined alarm threshold
- Rugged housing design IP54
- Very fast reaction for the detection of smallest amounts of methane
- Detection of methane also by multiple insulating glazing
- Simple, intuitive operation via function keys and touch screen
- No cross sensitivity to other hydrocarbons
- Green laser marker „CLASS 2M“ for optimum visibility measuring range, even in direct sunlight
- Choice of graphical or numerical display of the measured values
- Monitoring of reflection quality by appropriate optical and acoustic indication
- Rechargeable Li-ion Battery for 8 hours working time

Technical data	
calibration gas	Methane (CH4)
display	Color LCD touch screen
reaction time	0.1 seconds
detection method	Tuneable diode laser absorption spectroscopy (TDLAS)
operating time	8 hours per charge (6 hours charging time)
power supply	Rechargeable Li-ion Battery
scanning range	30 m standard, 50 m under good reflection conditions
weight	1.1 kg
dimensions	213 × 155 × 66 mm
measuring range	0 ... 50.000 ppm x m
temperature range	-17°C to 50°C
humidity	5 to 90% rel. humidity
protection class	IP54
connections	USB, earphone, DC jack, GPS, bluetooth
scope of delivery	Earphones, carrying strap, rugged carrying case, charger
guarantee	24 month

ELLI

ELLI is an innovative, portable laser measuring device that can be easily monitor difficult or impossible to reach areas and hazardous areas from a distance.

By the TDLAS (Tunable Diode Laser Absorption Spectroscopy) detection technology, it is possible for the user to determine methane safe from a distance. For this purpose, the laser beam must be directed only to the post to be checked. This detection technology therefore provides a high added value for the user who does not have to enter a potential hazardous area for the inspection of pipelines. Only in the event of a gas leak properly trained staff must be employed by an Identified leak check and seal. Previously it was very difficult and especially time-consuming and costly to detect gas leaks using conventional flame ionization or semiconductor gas detectors. By this significantly reduced verification effort the review of gas leading systems or pipelines is very cost effective compared to conventional verification methods.

Typical areas of application:

- Checking of gas lines, for example Pipeline inspection, checking of lines at great heights
- Review of hazardous areas, for example Biogas plants, gas pressure regulating stations
- Recognition of higher methane concentrations in buildings through windows
- Remote check of enclosed gas plants
- Unscheduled testing of underground pipelines

Functionality:

For the inspection of gas lines or fittings the laser beam has to be directed to the inspection area. In this case, the device measures the methane concentration using the difference between the emitted and the received (reflected) infrared laser bea. The wavelength of the laser beam used ensures selective measurement of methane.

The measured value is the product of the density of methane between the detector and the targeting point as well as the path length through the cloud of gas. The measured value would be indicated in ppm x m and is a measure of the so-called concentration length.

Subject to technical changes!

Esders

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