FIXED SYSTEMS

L-TEK P100

Portable Laser Methane Product

The L-TEK P100 uses TDLAS (Tunable Semiconductor Laser Absorption Spectroscopy) technology to quantitatively measure the methane gas concentration in the target area by absorbing the specific wavelength laser with methane gas, and quickly measure the methane gas concentration in the area.

The L-TEK P100 utilizes TDLAS technology to monitor methane and methane-containing gas concentrations in a target area by leveraging the specific absorption characteristics of methane at certain laser wavelengths. This portable detector is commonly used for inspecting methane in industries such as petroleum, chemical processing, and urban gas. By enabling long-distance, non-contact measurement, it ensures operator safety in high-risk environments unlike traditional monitors. Its compact design, data extraction and <1 second response time makes it easy for inspectors to carry and enhances detection efficiency unlike other devices.

FEATURES

- **Long-distance monitoring** – Lasers enable long-distance gas leakage monitoring by detecting leaks directly, unlike traditional passive methods that rely on gas diffusion into the detector.
- **Low maintenance cost** – Along with the durability of the components, L-TEK P100 uses non-contact measurement, preventing poisoning, which extends product life by 5-10 times and lowers maintenance costs.
- **High accuracy, no false alarms** – The single-mode laser in L-TEK P100 precisely targets methane's infra-red gas absorption line, avoiding interference from other gases and environmental conditions. This ensures accurate leak measurement and eliminates false alarms, unlike IR camera technologies
- **Fast response time** – When it comes to detecting gas, response time is crucial. L-TEK P100 offers a millisecond response time, which is 100 times faster than catalytic combustion and electrochemical sensors, so identifying and quantifying leaks takes seconds not minutes. This makes laser gas sensors 100x more efficient than other combustible gas sensors.
- **Long battery life** – Identifying leaks shouldn't have to stop after a few hours when a device's battery dies. The L-Tek P100 lasts for nearly a whole shift. This means less stoppages and less devices are required as back-up unlike similar non-contact methane measurement products.
- **Data Extraction** – Reviewing time-stamped readings for reporting and data analysis is easy by extracting the data logs into computers through the included USB cable.

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SPECIFICATIONS

TARGET GAS	Methane (CH4)
SIZE	138mm x 49mm x 36mm
WEIGHT	320g
RANGE	0 – 99999ppm
SENSITIVITY	5ppm
DETECTION DISTANCE	Standard 20m; Increased range to 50m
RESPONSE TIME	≤0.05 (adjustable)
POWER CONSUMPTION	< 2W
BATTERY LIFE	6 hours
CALIBRATION	Long term calibration free
OPERATING TEMPERATURE	-20°C – 50°C
HUMIDITY	98% RH non-condensing
INGRESS PROTECTION	IP54
STANDARDS	IEC 60079-0: 2017 Ed.7 IEC 60079-11: 2011 Ed.6 IEC 60079-28: 2015 Ed.2
EXPLOSION PROOF SIGN	IECEx : Ex ib op is IIB T4 Gb
LASER SAFETY LEVEL	Detection laser: Class I Indicating laser: Class III

Disclaimer
Due to ongoing research and product improvement, specifications are subject to change without notice. While every effort has been made to ensure accuracy in this document, no responsibility can be accepted for errors or omissions. Data may change, as well as legislation, and you are strongly advised to obtain copies of the most recently issued regulations, standards, and guidelines. This document is not intended to form the basis of a contract.

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