TDLAS Methane (CH4) Specific Sensor

Tech Note 230712

Tunable diode laser absorption spectroscopy (TDLAS) is one of the most sensitive and selective technologies used for measuring specific gases (methane, O2, CO, NH3.etc) by the characteristic of tunable laser source with narrow linewidth and tenability.

The CH4 gas sensor developed by Senovol Corporation utilizes TDLAS to achieve accurate and reliable measurement of specific methane. Our product incorporates a laser, photodetector (PD), and gas cell in a miniaturized integrated package, ensuring high precision, stability, and reliability.

Product Dimensions

Top View Side View Bottom View

Highlights

1. Selective Measurement: Highly selective measurements specifically target methane gas by narrow absorbing spectrum, minimizing false readings from other gases or environmental factors.
2. Enhanced Measuring Precision and Stability: Offers exceptional precision and stability in measurements by laser technology. Ensures accurate and reliable results.
3. Long Lifespan: With a solid-state design and minimal maintenance requirements, this sensor offers a long lifespan, reducing the need for frequent replacements and associated costs.
4. Low Maintenance: The solid-state design eliminates the need for calibration, reducing maintenance requirements and saving time and resources.
5. Humidity Interference-Free: This sensor is designed to operate without interference from humidity, ensuring accurate methane detection.
6. Optimal Optical Path Efficiency: Achieves high absorption efficiency in the optical path. Maximizes the utilization of light for improved performance.

Performances