

ENSURE EMPLOYEE AND ASSET SAFETY

Our Tunable Diode Laser Absorption Spectrometer (TDLAS) is perfect for detecting methane at distances of up to 50 m in as little volume as 1 pmm.m. With a response time of 0.5 seconds the device detects and locates gas leaks rapidly. Perfect for finding methane leak points along pipelines. Pair the TDLAS with our line of thermal imagers and professional analysis software to gather temperature data.

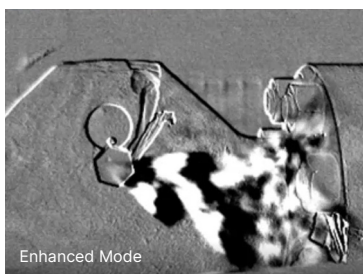


TDLAS



HIGH MEASUREMENT SENSITIVITY

Laser absorption spectroscopy measures the concentration of methane gas or the level of CH_4 within a gas mixture. Anti-interference technology reduces the impact of other gases, moisture, or dust in the environment. This means very low concentrations of the gas can be measured easily day or night.



FAST RESPONSE TIME

Detecting and measuring methane quickly and accurately is important. With a response time of 0.5 seconds lives are saved, company assets are protected, and greenhouse gas emissions are reduced. Pair the device with our IR Flash Pro software and enable enhanced mode to spot leaks even faster.



AERIAL SYSTEM INTEGRATION

Fix mount the TDLAS in a designated location or affix it to an aerial device to provide remote detection capabilities and find leaks from pipelines and storage facilities at a safe distance. Combine the tunable laser with ICI's line of thermal devices to gather infrared data for temperature analysis.

TDLAS TUNABLE DIODE LASER



ICI's Tunable Diode Laser Absorption Spectrometer (TDLAS) is an innovative long-range detector which allows methane gas (CH₄) to be detected at distances of up to 50 m in as little volume as 1 ppm.m. It can be fixed mounted or attached to an aerial vehicle. Combine the tunable laser with ICI's line of thermal devices to gather infrared data for temperature analysis. Ideal for use in industrial, commercial, and research environments.

Features

- Intrinsically safe
- Ultra low power consumption
- Detection distance up to 50 m
- High stability
- Fast response
- UAV/UAS integration

Applications

- Methane detection
- Gas leak detection
- UAV/UAS integration
- Pipeline inspections
- Industrial monitoring
- Petrochemical monitoring
- Scientific research
- Research & development
- Space research & exploration

Specifications

- **Target Gas:** Methane (CH₄)
- **Measurement Range:** 0 ppm.m to 40,000 ppm.m
- **Detection Distance:** 0.5 m (1.6') - 50 m (164')*
- **Minimum Resolution:** 1 ppm.m
- **Response Time:** 0.5 seconds
- **Operating Pressure:** 68 kPa - 115 kPa
- **Operation Range:** -20 °C to 50 °C (-4 °F to 122 °F)
- **Storage Range:** -40 °C to 60 °C (-40 °F to 140 °F)
- **Humidity:** 98%
- **Dimensions:**
120 mm x 97 mm x 97 mm (L x W x H ± 0.5 mm)
(4.72" x 3.82" x 3.82" (L x W x H ± 0.02"))
- **Power:** DC 4.2V - 5V, 2.5 W - 3.5 W
- **Weight (without lens):** 664 g (1.46 lbs)
- **Interface:** Mini USB
- **Communication Port:** Uart 3.3 V TTL
- **Basic Tolerance:** ± 10 % @ 1000 ppm.m

Options

- Sensor Control Module integration
- UAV/UAS integration
- IR Flash Pro software



TDLAS

* Long Range version available, does not work from 0 m - 20 m