

ICI | Tunable Diode Laser Absorption Spectrometer



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We are IR™

ICI | Tunable Diode Laser Absorption Spectrometer

ICI's Tunable Diode Laser Absorption Spectrometer (T.D.L.A.S.) is an innovative long-range detector which allows methane gas (CH_4) to be detected at distances of up to 50m at as little volume as 1 pmm.m. Utilising laser technology, methane leaks are located by pointing the laser beam towards the suspected leak, or along the survey line. Detects methane by emitting infrared light and examining reflected light density. Our T.D.L.A.S. system is ideal for use in industrial, commercial and research environments where it can be fixed mounted or attached to an aerial vehicle.

Features

- Intrinsically Safe Design
- Ultra Low Power Consumption
- Detection distance up to 50m
- High Stability
- Fast Response

Specifications

- **Target Gas:** Methane (CH_4)
- **Measurement Range:** 1 PPM - 50,000 PPM
- **Detection Distance:** 0.5m (1.6') - 50m (164')*
- **Detecting Range:** 0 - 40,000 pmm.m
- **Minimum Resolution:** 1 ppm.m
- **Response Time:** 0.5 seconds
- **Operation Range:** -20°C to 50°C
- **Storage Range:** -40°C to 60°C
- **Power Consumption:** 3.5W Max.
- **Working Voltage:** 4.2 - 5 VDC
- **Communication Port:** Uart 3.3V TTL
- **Basic Tolerance:** $\pm 10\%$ @1000 pmm.m
- USB 2.0 for Power & Data
- **Weight:** 664g
- **Dimensions:** without lens
92mmx92mmx116mm (HxWxD +/- .5mm)
- **Operating Pressure:** 68kPn - 115kPn
- **Humidity:** 98%

Applications

- Methane Detection
- Industrial
- Aerial
- Natural Gas
- Scientific Research
- Space Reseach & Exploration
- Research & Development
- Fixed Mount



*Long Range version available but does not work from 0 - 20 meters (0 - 60 feet).