



# METHASENSE TRACE

Wireless Autonomous Versatile Methane Detector

## Description



The MethaSense Trace is designed for a wide range of applications, including emissions monitoring, utility environments, and early-warning safety detection. Its broad measurement range and very low detection sensitivity make it ideal for both high-precision monitoring and rapid leak detection.

With extreme sensitivity, it can detect methane at concentrations of just a few hundred ppm and trigger alarms at configurable thresholds within the %LEL range—providing reliable early warning for safety-critical environments.

Powered by advanced dual-channel NDIR (Non-Dispersive Infrared) technology, MethaSense Trace delivers  $\pm 50$  ppm detection accuracy. Its maintenance-free design eliminates manual recalibration and operates for up to 10 years on a single battery, ensuring consistent performance in the most challenging environments.

ATEX and IECEx certified and rated to IP67, MethaSense Trace withstands hazardous areas, harsh weather, and extreme industrial conditions. Its rugged build ensures protection against dust, water, and extreme weather, supporting uninterrupted monitoring in industrial settings.

Designed for efficiency and longevity, MethaSense Trace offers a Total Cost of Ownership solution with low operational costs, minimal maintenance, and full-range methane detection capabilities—making it a trusted choice for environmental safety and compliance.

## Features

- 24/7 continuous methane monitoring.
- Zone 1 certified and IP67.
- Methane sensor range from 50 ppm up 100 % Vol.
- 3 configurable alarm thresholds.
- Extended battery lifespan up to 10 years.
- LoRaWAN® wide area coverage for reliable wireless connectivity.
- Adjustable transmission parameters by downlink : Communication interval rate, Spreading Factors.



*Real-Time Gas Monitoring  
with Smart Connectivity and 24/7 Uptime*



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## Specifications

<b>Gas sensor Technology</b>	Ultra-Low Power Non-Dispersive Infrared (NDIR)
<b>Target gas</b>	Calibrated to Methane (CH <sub>4</sub> )
<b>Measurement range</b>	0 to 100% volume CH <sub>4</sub>
<b>Operating mode</b>	Continuous, 1 measure every 3 seconds
<b>Accuracy</b>	50ppm or ±10% of measurement, whichever is greater
<b>Warm up time</b>	< 2 minutes
<b>Response time T90</b>	< 30 seconds

<b>Outline Dimensions</b>	115 × 84 × 35 mm (WxHxD)
<b>Weight</b>	300g, including 120g batteries
<b>Mounting</b>	Attach anywhere to any vertical or horizontal pole
<b>Operating conditions</b>	Temp: -40°C to +60°C , RH: 0-100%
<b>Certification</b>	IECEX & ATEX Intrinsic safety certified, Zone 1
<b>Marking</b>	II 2 G / Ex ib op is IIC T4 Gb

<b>Battery pack reference</b>	Only use Teledyne certified battery pack
<b>Battery electrical specification</b>	3.6V, 17 A.h
<b>Average current consumption</b>	129 µA
<b>Battery lifetime</b>	>10 years with a transmission period of 4hours > 5 years with a transmission period of 30min > 4 years with a transmission period of 16min > 2 years with a transmission period of 3min

<b>Radio communication</b>	LoRaWAN class A device: 868 MHz (Europe, UK, UAE, etc.) / 915MHz (USA, Canada, etc.)
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<b>Communication monitoring set up</b>	Background monitoring: 1 hourly period data sent every 8 hours* KeepAlive: every 7 days
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*\*Thresholds and periods are configurable*

Teledyne Gas & Flame Detection quality assurance programmes demand the continuous assessment and improvement of all our products. Information in this leaflet could thus change without notification and does not constitute a product specification. For more information, please contact us or your company representative.



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