



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 ± 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.

LoRaWAN



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



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Specifications

Gas sensor Technology	Ultra-Low Power Non-Dispersive Infrared (NDIR)
Target gas	Calibrated to Methane (CH ₄)
Measurement range	0 to 100% volume CH ₄
Operating mode	Continuous, 1 measure every 3 seconds
Accuracy	50ppm or ±10% of measurement, whichever is greater
Warm up time	< 2 minutes
Response time T90	< 30 seconds
Outline Dimensions	115 × 84 × 35 mm (WxHxD)
Weight	300g, including 120g batteries
Mounting	Attach anywhere to any vertical or horizontal pole
Operating conditions	Temp: -40°C to +60°C, RH: 0-100%
Certification	IECEx & ATEX Intrinsic safety certified, Zone 1
Marking	II 2 G / Ex ib op is IIC T4 Gb
Battery pack reference	Only use Teledyne certified battery pack
Battery electrical specification	3.6V, 17 A.h
Average current consumption	129 µA
Battery lifetime	>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
Radio communication	LoRaWAN class A device: 868 MHz (Europe, UK, UAE, etc.) / 915MHz (USA, Canada, etc.)
Communication monitoring set up	Background monitoring: 1 hourly period data sent every 8 hours* KeepAlive: every 7 days

*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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