




NDIR Gas Sensor for Methane Detection

Membrapor's CH4/IR-5 is a dual-channel Non-Dispersive Infrared (NDIR) methane sensor. It provides reliable, precise, and selective measurements for applications such as continuous threshold monitoring and leak detection in oil & gas, biogas, and landfill environments.

Main Features

-  Small and compact 4-Series format
-  Response time T90 < 30s
-  High-reliability components with MTTF values > 100'000 h



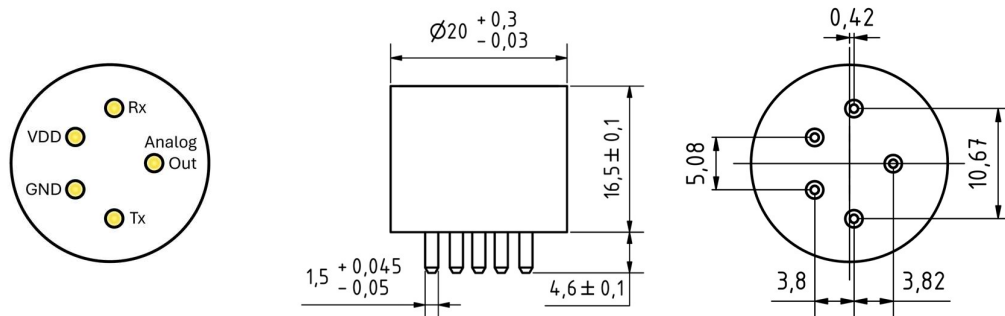
Description

Based on MIR-LED technology, the CH4/IR-5 sensor has an average power consumption of 82.5 mW @ 3.3 V (continuous operation), which makes it suitable for use in rechargeable battery-powered devices. The sensor features analog and digital readouts (UART interface) and includes integrated temperature and humidity compensation for enhanced stability. Intrinsic safety is ensured through ATEX + IECEx certification.

Performance Data

Measurement range	0 - 5%vol (0 - 100% LEL)	
Accuracy	Range below 4% of FS (< 2'000 ppm)	± 0.4% of FS range (=200 ppm)
	4% < Range < 20% of FS (2'000 ppm - 10'000 ppm)	± 0.6% of FS range (=300 ppm)
	Range above 20% of FS (> 10'000 ppm)	± 1.2% of FS range (=600 ppm)

Pinout and Mechanical Specifications



Performance data recorded at 20 – 25 °C, 30 - 50% RH, 900 - 1100 mbar

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