

MIPEX-05 [CH₄ | C₃H₈ | CO₂]

Ultra-low power sensor in the 4th series housing for portable and wireless devices



MIPEX-05 is an ultra-low power infrared gas sensor designed for automatic continuous measurement of methane, hydrocarbons and CO₂ concentrations in hazardous areas.

Technical specifications

Parameter	Value
Measurement range, % vol.	0 ... 5, 0 ... 100 – CH ₄
	0 ... 2.5, 0 ... 20 – C ₃ H ₈
	0 ... 5, 0 ... 10 – CO ₂
Accuracy (+20...+25 °C)	±0.1% vol. or ±5% of reading (whichever is greater) for CH ₄
	±0,05% vol. or ±5% of reading (whichever is greater) for C ₃ H ₈ or CO ₂
Response time (T90) sec., with dust filter	≤25 – CH ₄
	≤30 – C ₃ H ₈
	≤25 – CO ₂
Operating temperature	-40...+60°C
Humidity tolerance	Up to 98% (without condensation)
Supply voltage	+2.7...+5.0 V
Average current, µA	60
Dimensions	∅20.1×16.6 mm (w/o pins)
Housing material	Polycarbonate Lexan®
Weight, g.	7.5
Sensor is designed in compliance with:	
IEC 60079-0, IEC 60079-11	
EN IEC 60079-0 / EN 60079-11	
UL913, CAN/CSA-C22.2 No. 157-92	

Features

- Ultra-low power consumption. Average current at constant measurement of concentration is less than 60 µA.
- Smart sensor with embedded microcontroller returns linearized, temperature-compensated output data.
- LED based dual wavelength technology.
- Fast response time (T90).
- Measurement range:
 - up to 100% vol. for CH₄;
 - up to 20% vol. for C₃H₈;
 - up to 10% vol. for CO₂.
- Provides intrinsically safe explosion protection level “ia”.
- High-sensitivity version with 10 ppm resolution available for propane.