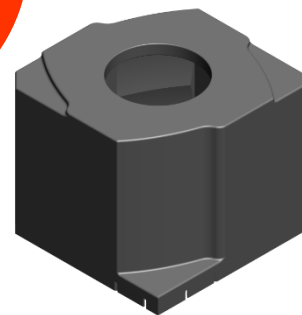


MIPEX-01D In development

[CH₄&CO₂ | HC &CO₂]

Ultra-low power dual NDIR gas sensor – hydrocarbons and carbon dioxide



MIPEX-1D is an ultra-low power NDIR gas sensor intended for automatic continuous simultaneous measurement of the concentrations of methane & carbon dioxide or propane & carbon dioxide in atmosphere of hazardous areas.

Technical specifications

Parameter	Value
Measurement range, % vol.	0...5 (CH ₄) & 0...5 (CO ₂)
	0...100 (CH ₄) & 0...5 (CO ₂)
	0...2.5 (C ₃ H ₈) & 0...5 (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
	≤10 – CH ₄ and C ₃ H ₈
Response time T(90) sec.	≤15 – CO ₂
	Operating temperature
Operating temperature	-40...+50 °C
Humidity tolerance	Up to 98% (without condensation)
Supply voltage	+2.7...+5.0 V
Average current, µA	≤160
Dimensions	19.9×19.9×16.6 mm
Housing material	Polycarbonate Lexan®
Weight, g.	15
Sensor is designed in compliance with:	
IEC 60079-0, IEC 60079-11, IEC 60079-28	
UL 913, UL 60079-0, UL 60079-11,	
CSA C22.2 No. 60079-0, CSA C22.2 No. 60079-11	
EN IEC 60079-0, EN 60079-11, EN 60079-28	

This specification is subject to change without notice

Features

- Power consumption: less than 0.5 mW.
- Simultaneous measurement of the concentrations of CH₄&CO₂ or HC &CO₂
- Compact-sized 19.9×19.9×16.6 mm.
- Smart sensor with embedded microcontroller returns linearized, temperature-compensated output data.
- LED based dual wavelength technology.
- Provides intrinsically safe explosion protection level “ia”.
- Long-term measurement stability: over 10 years.

