

MIPEX-04 ppm

[CH₄ | C₃H₈]

Ultra-low power infrared ppm range gas sensor



MIPEX-04 ppm is a high-performance NDIR sensor with 10 ppm resolution, designed to detect methane and propane at low concentrations.

Technical specifications

Parameter	Value	
Measurement range	0 ... 1000 ppm	0.1...5.0% vol. – CH ₄
	0... 600 ppm	0.06 ... 2.5% vol. – C ₃ H ₈
Accuracy (+20...+25 °C)	± 50 ppm	±5% of reading (whichever is greater) for CH ₄
	±30 ppm	±5% of reading (whichever is greater) for C ₃ H ₈
Response time (T90) sec, with dust filter	≤30 – CH ₄	
	≤45 – C ₃ H ₈	
Operating temperature	-40...+60 °C	
Humidity tolerance	Up to 98% (without condensation)	
Supply voltage	+2.8...+5.0 V	
Average current, µA	Less than 100	
Dimensions	52×24×18 mm	
Housing material	Polycarbonate Lexan®	
Weight, g.	11.0...13.5	
Marking and standards:		
I M1 / II 1G Ex ia I Ma / Ex ia IIC Ga according to EN IEC 60079-0 / EN 60079-11		
C I, Div1, Gr A,B,C,D; C I, Zone 0, AEx ia IIC Ga; Ex ia IIC Ga according to UL 913, CAN/CSA-C22.2 No.157-92		
Ex ia I Ma/Ex ia IIC Ga according to IEC 60079-0, IEC 60079-11		

Features

- Target application: portable gas detectors for industrial safety with 10 ppm resolution.
- Allows designing battery operated gas detector lasting no less than 12 months without charge.
- Average operating current is less than 100 microAmps.
- Smart sensor with embedded microcontroller returns linearized, temperature-compensated output data.
- LED based dual wavelength technology.
- Measurement range: Operating over a wide range with high resolution from:
 - 50 ppm to LEL concentration for methane;
 - 30 ppm to LEL concentration for propane.
- Provides intrinsically safe explosion protection level "ia".