

Combustible Gas Sensors

MOS Combustible Gas Sensor

- Long lifespan
- Low cost
- Simple drive circuit



MQ-4

Detection range		300~10000 ppm CH4	
Standard Circuit	Loop voltage	V _C	5.0±0.1 V DC
	Heater voltage	V _H	5.0±0.1 V AC or DC
	Heater consumption	P _H	≤ 1 W
Sensor character under standard test conditions	Sensitivity	S	R ₀ (in air)/R _S (in 5000ppm CH4) ≥ 5
	Output voltage	V _S	2.5 V ~ 4.0 V (in 5000ppm CH4)
	Concentration slope	α	≤ 0.6 (R _{5000ppm} /R _{1000ppm} CH4)
	Lifespan		10 years
Size		φ19.0*16 mm	

MOS Combustible Gas Sensor

- Small size
- Fast response and resume
- Low power



MP-4

Detection range		300~10000 ppm CH4	
Standard Circuit	Loop voltage	V _C	≤ 24V DC
	Heater voltage	V _H	5.0±0.1 V AC or DC
	Heater consumption	P _H	≤ 350 mW
Sensor character under standard test conditions	Sensitivity	S	R ₀ (in air)/R _S (in 5000ppm CH4) ≥ 5
	Output voltage	V _S	2.5 V ~ 4.0 V (in 5000ppm CH4)
	Concentration slope	α	≤ 0.6 (R _{5000ppm} /R _{1000ppm} CH4)
	Lifespan		10 years
Size		φ9.4*7.0 mm	

Catalytic Combustible Gas Sensor

- Bridge output voltage in linear
- Resist H2S poisoning & organosilicone
- Good repeatability & selectivity



MC105

Measuring range	0~100 %LEL
Working voltage	2.5±0.1 V
Working current	150±10 mA
Sensitivity	20~50 mV (20%LEL CH4)
	30~70 mV (45%LEL C3H8)
Response time (T ₉₀)	≤ 10 s
Working conditions	-10~+55 °C, < 95 %RH
Lifespan	5 years
Size	φ12.0×9.5 mm

Catalytic Industrial Combustible Gas Sensor

- Fast response
- Good stability
- Anti-explosion mark Exd I Mb



MC113

Measuring range	0~100 %LEL
Working voltage	2.8±0.1 V
Working current	90±10 mA
Sensitivity	20~40 mV (20%LEL CH4)
	30~60 mV (45%LEL C3H8)
Response time (T ₉₀)	≤ 10 s
Working conditions	-40~+70 °C, < 95 %RH
Lifespan	3 years
Size	φ6.0×6.5 mm

Hot Wire Combustible Gas Sensor

- Good linearity
- Quick response
- Good repeatability



MR007

Detection range	0~100 %LEL
Working voltage	2.5±0.1 V
Working current	150±10 mA
Sensitivity	12~45 mV (20%LEL CH4)
	10~30 mV (20%LEL C3H8)
Response time (T ₉₀)	≤ 10 s
Working conditions	-40~+70 °C, < 95 %RH
Lifespan	5 years
Size	φ12.4×10.2 mm

Laser Methane (CH4) Sensor

- High precision
- Good selectivity
- Digital output, UART (TTL 3.3V)



MH-L9041A

Detection range	3~100 %LEL
Accuracy	±3 %LEL
Resolution	0.2 %LEL
Response time	≤ 15 s (cold boot)
Working voltage	3.6~5 V DC
Average current	≤ 60 mA @25°C
Working conditions	-20~60 °C, 0~99 %RH (no condensation) 80~116 kpa
Lifespan	≥ 5 years
Size	φ40.0×68.0 mm

NDIR Industrial Methane (CH4) Sensor

- Temperature compensation
- Low consumption
- Minimum temperature: -40°C



MH-441D

Detection range	0~10 %VOL
Working voltage	3.6~5 V DC
Output	UART/ 0.4~2.0 V DC
Average current	60 mA
Response time (T ₉₀)	< 30 s
Working conditions	-40 °C~60 °C, 0~95% RH
Lifespan	> 5 years
Size	φ20.0×22.4 mm

NDIR Industrial Combustible Gas Sensor

- Flameproof structure
- Support high humidity environment
- -60 C can be customized



MH-T7042

Detection range	0~100 %VOL selectable
Working voltage	4.5~5.5 V DC
Output	UART
Average current	<100 mA
Response time (T ₉₀)	< 30 s
Working conditions	-40~70 °C, 0~95% RH
Lifespan	> 5 years
Size	φ51.0×65.0 mm



Combustible Gas Leak Monitoring



Fire/Safety Detection System



Combustible Gas Leak Alarm