

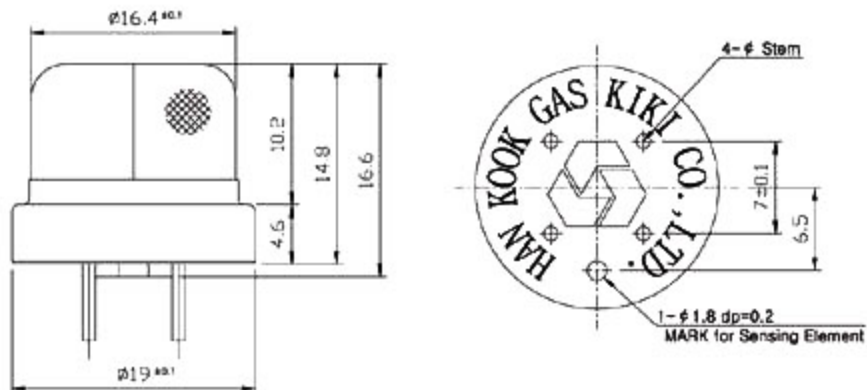
Gas Sensor

GAS SENSOR >> MI-02

01 SPECIFICATIONS

Type	All-in-one (with a sensor and a temperature compensation device)
Model	MI-02
Sensing Type	Catalytic Combustion (Hot Wire) Type
Detectable Gases	Methane, Butane, LNG, LPG
Bridge Voltage	DC 2.3V \pm 10%
Current to Element	Less than 210mA \pm 10mA
Power Consumption	0.46 W \pm 10%
Initial Stabilization Time	30 secs \pm 10%
Response Speed	Within 10 secs
Temperature Catalyst	425°C \pm 15°C (Calculating Valve)
Temperature Range	-20°C ~ 50°C
Platinum coil resistance	2.1 Ω \pm 0.05 Ω
Straight	Very Good
Sensitivity in Voltage from Bridge	Higher than 22mV at 0.20% of iso-butane(i-C4H10) or 0.04% of Methane (CH4)
Sensor Duration	More Than 3 Year

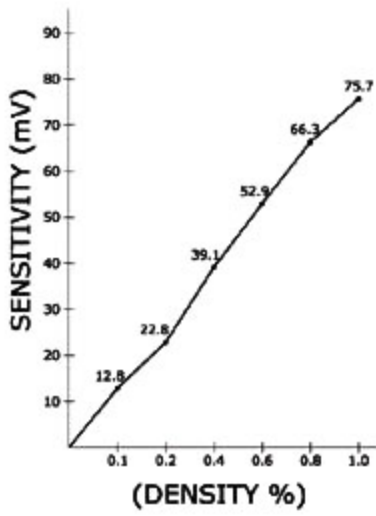
1. OUTLINE DRAWING (MI-02)



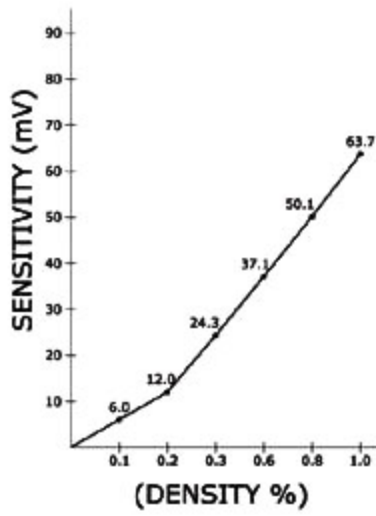
2. DENSITY AND SENSITIVITY

COMBUSTIBLE	DENSITY			SENSITIVITY(mV)			REMARKS
GAS	(%)	(ppm)	% Of LEL	AVE	Min	Max	
ISO-BUTANE (I-C ₄ H ₁₀) LEL:1.8% S.G.:2.00 633Kcal/mol	0.066	660	3.7	7.8	6.5	9.3	Not more than 10.0mV
	0.100	1,000	5.6	12.8	11.1	14.8	
	0.200	2,000	11.1	22.8	19.5	26.2	
	0.300	3,000	16.7	31.4	26.4	35.9	
	0.400	4,000	22.2	39.1	32.3	44.6	
	0.500	5,000	27.8	46.3	38.0	52.4	
	0.600	6,000	33.3	52.9	43.5	60.0	
	0.700	7,000	38.9	61.1	49.7	69.6	
	0.800	8,000	44.4	66.3	54.4	75.6	
	0.900	9,000	50.0	70.9	57.7	81.5	
	1.000	10,000	55.6	75.7	60.9	85.3	
METHANE (CH ₄) LEL: 5.0% S.G.: 0.55 192Kcal/mol	0.080	800	1.6	4.3	2.8	6.7	Not more than 10.0mV
	0.200	2,000	4.0	12.0	10.5	14.0	
	0.320	3,200	6.4	19.5	17.0	22.5	
	0.400	4,000	8.0	24.3	21.5	28.1	
	0.520	5,200	10.4	31.9	28.3	36.7	
	0.600	6,000	12.0	37.1	33.2	42.1	
	0.720	7,200	14.4	44.7	40.0	50.2	
	0.800	8,000	16.0	50.1	44.0	56.4	
	0.920	9,200	18.4	58.2	52.2	65.5	
	1.000	10,000	20.0	63.7	57.3	71.2	
	1.120	11,200	22.4	71.4	63.9	80.2	
	1.200	12,000	24.0	76.8	68.8	85.5	
	1.400	14,000	28.0	89.0	80.0	98.3	
	1.600	16,000	32.0	99.3	89.6	108.5	
	1.800	18,000	36.0	110.3	100.2	119.1	
2.000	20,000	40.0	121.0	110.6	130.9		

ISO-BUTANE (I-C₄H₁₀)



METHANE (CH₄)



3. RECOMMENDABLE CIRCUIT DIAGRAM

