

## Gas sensor module

# FIS3062-00NC-20

### FIS3062-00C4-20

FIS3062-00\*\*-20 gas sensor module is a product that incorporates a semiconductor gas sensor into the control circuit. The drive control of gas sensor and output signal processing are performed by the microcomputer program.





Without case (NC type)

With case (C4 type)

#### **Features**

#### High quality and high reliability

The mounted semiconductor SB-type gas sensor developed by our company features high sensitivity, quick response, and excellent durability.

#### No need for calibration

The calibration with detection gas is already carried out at our factory. Therefore, you can use it as soon as the module is delivered to you.

### Easy installation in your device

Our module is compact, lightweight, and easy to take out the output signal. You can incorporate our module into your device easily.

#### Can be used under severe environment/condition

You can choose module with or without case. Module with case has water-proof function, so that you can use under severe environment e.g. outside, inside of refrigerator etc.

#### Various output specifications

- Alarm output: 1 or 2 point(s) can be set.
- Concentration output is included within serial signal.
- Malfunction output: Sensor failure, circuit failure, various gas or silicone poisoning can be detected.

**SPECIFICATIONS** 



Item	Specifications		
	Without case (NC type)	With case (C4 type)	
Part No.	FIS3062-00NC-20	FIS3062-00C4-20	
Mounted gas sensor	SB-15C		
Target gas	LPG(Propane, butane)		
Alarm response	Within 30 seconds		
Power supply	5.0V DC ± 5%		
Alarm output	CMOS, LED	Open collector, LED	
Alarm concentration	Isobutane: 0.200 % (Hystereris: 70 %)		
Malfunction output	CMOS, LED	Open collector, LED	
Concentration output	Not included		
Average power consumption	35 mA		
Operating temperature range	-10 $\sim$ 50 $^{\circ}$ C (no condensation)		
Storage temperature range	-40∼60 ℃ (no condensation)		
Dimension	28 x 41 x 20(H) mm	31 x 44 x 20(H) mm	
Weight	5 g	19 g	

Connector pins	specifications

PIN#	Specification
1	DC5.0 V±5 %
2	GND
3	Malfunction output NC type : CMOS output C4 type : Open collector
4	Alarm output NC type : CMOS output C4 type : Open collector
5	_
6-10	_

### **■** Evaluation method

- 1. Apply the power supply voltage with pin 1 as DC5V and pin 2 as GND.
- 2. Wait for about 7 seconds until the initial warm-up operation is completed. (Green LED blinks)
- When the gas concentration exceeds the alarm level, the alarm output turns ON (LED blinks) and automatically canceled when the gas concentration gets decreased.
- 4. When you finish the measurement, turn off the input voltage.

#### ■ Notes on evaluation

- During operation, the sensor failure is always observed. In case of failure, the LED (red) and LED (green) will blink alternately at 0.25 second intervals, and if the sensor returns to normal, LED will switch itself off automatically.
- There is no regulation on the mounting direction of the product.
- $\bullet$  Do not spray high-concentrated gas directly on the gas sensor.
- Avoid storage or use near silicon or organic solvents.

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In the interest of continued product improvement, we reserve the right to change design features without prior notice.