

Ozone Monitor

SPECIFICATIONS

OZONE MONITOR A1320301-SP61 series

equipped with excellent sensitivity, selectivity, stability and long life OZONE SENSOR "SP-61"

For OZONE detection in air purifying, deodorizing, sterilization systems, photocopiers and for environmental monitoring systems

Features

- Suitable for environmental monitor by detecting 0 to 250ppb of ozone in atmosphere
- Inexpensive by using semiconductor type sensor
- Small wind velocity effect by integrating a fan and module into the case.
- Maintenance free
- Long life

Recently ozone has started to be used in commercial/domestic application: e.g. in HVAC (Heating Ventilation and Air Conditioning) systems. We have developed a new semiconductor ozone sensor using an innovative ITO (Indium Tin Oxide) sensing material for ozone detection.

Configuration of the ozone sensor is shown in Figs. 1 and 2. The monitor sensitivity is in Fig. 3, and the response in Fig. 4. This monitor has two models. One is for the output of 0 to 1V. The other is for 0 to 5V.

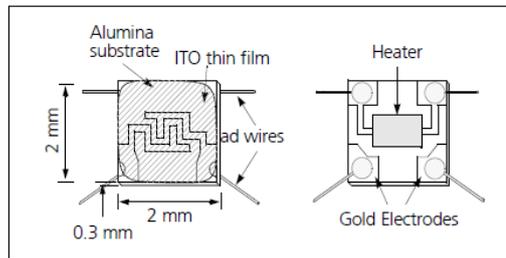


Fig. 1 Sensing Elements

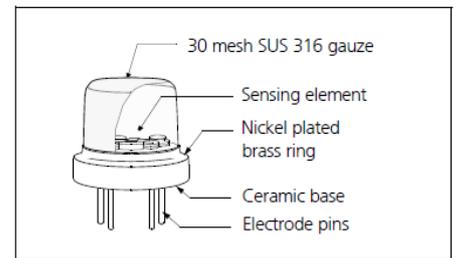


Fig. 2 Structure

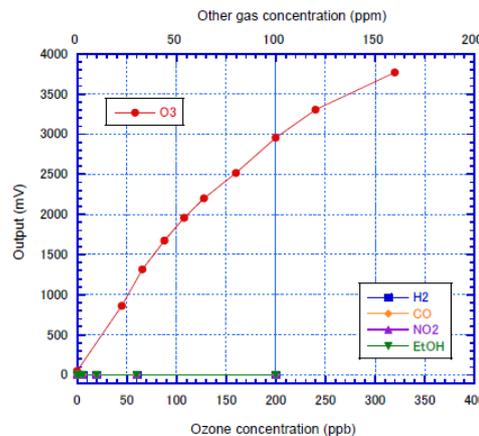


Fig. 3 Monitor sensitivity characteristics (Output range: 0 to 5V)

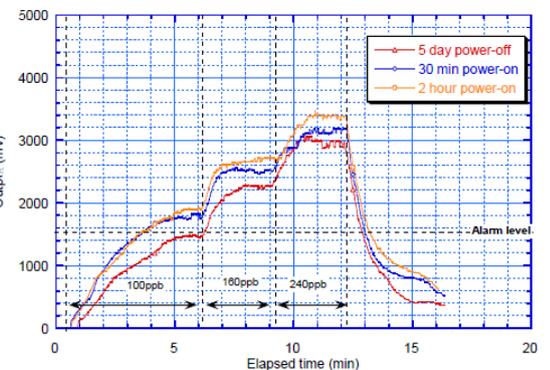


Fig. 4 Monitor Response (Output range: 0 to 5V)

Specifications: Ozone Monitor

Basic specifications	
Power supply	5V DC ± 5%
Initial warm-up time:	About 3 minutes
Sensor	SP-61
Detection range	0 to 250ppb
Analogue output	0 to 1V or 0 to 5V (Cables: AWG24, Length: 50cm)
Alarm output	PNP transistor output, 5V DC output at ON, no delay alarm, auto-reset
Alarm concentration	80ppb of ozone
Power consumption	Lower than 700mW (400mW for sensor)
Operating temperature	0°C to 40°C
Storage temperature	-10°C to 60°C
Size	51(W) x 37(D) x 22(H) mm
Weight	15 g

Model	Features	Photo
A1320301-SP61-01F	<ul style="list-style-type: none"> • Sensor: SP-61 • Module: A1320301-SP61-01 • Analogue output: 0 to 1V 	
A1320301-SP61-02F	<ul style="list-style-type: none"> • Sensor: SP-61 • Module: A1320301-SP61-02 • Analogue output: 0 to 5V 	

I/O cables specifications	Operation procedure												
<table border="1"> <thead> <tr> <th>Color</th> <th>Specifications</th> </tr> </thead> <tbody> <tr> <td>Black</td> <td>GND for power supply</td> </tr> <tr> <td>Red</td> <td>+5V DC for power supply supply</td> </tr> <tr> <td>White</td> <td>Analogue output</td> </tr> <tr> <td>Yellow</td> <td>GND for analogue output</td> </tr> <tr> <td>Green</td> <td>Alarm output</td> </tr> </tbody> </table>	Color	Specifications	Black	GND for power supply	Red	+5V DC for power supply supply	White	Analogue output	Yellow	GND for analogue output	Green	Alarm output	<ol style="list-style-type: none"> 1. Connect cables (Black and Red) to 5V DC power supply. 2. Wait 3 minutes (warm-up). 3. Measure analogue output between cables (White and Yellow) to convert ozone concentration. 4. Disconnect power supply from the monitor when the measurement is finished. <p>* When the concentration exceeds the alarm level, the alarm output turns ON. When the concentration decreases and becomes lower than the alarm level, the alarm output turns OFF.</p>
Color	Specifications												
Black	GND for power supply												
Red	+5V DC for power supply supply												
White	Analogue output												
Yellow	GND for analogue output												
Green	Alarm output												

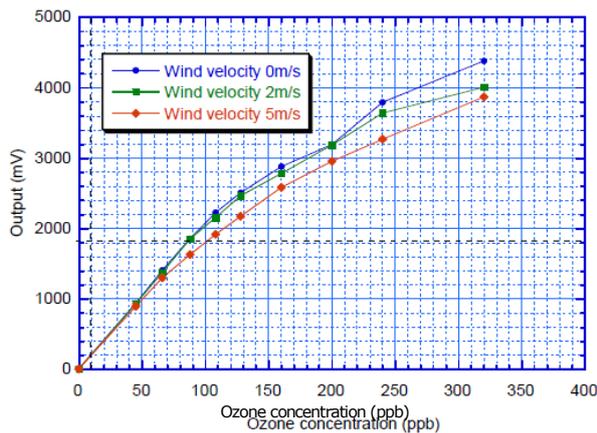


Fig. 5 Wind influence (Output range: 0 to 5V)

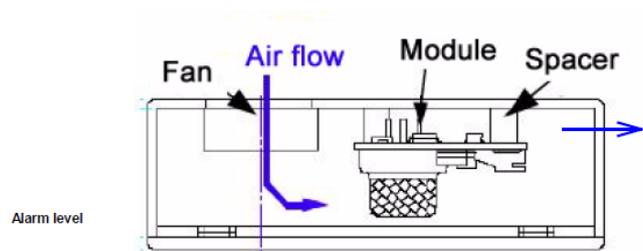


Fig. 6 Inside monitor

Fig. 6 Inside monitor

Please contact

OCTOBER, 2018

Nissha FIS, Inc.
2-4-28, Tagawa
Yodogawa, Osaka
532-0027 Japan

Tel: +81 6-7176-3911
Fax: +81 6-7176-3912
<http://www.fisinc.co.jp>

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