

## OZONE MONITOR

equipped with a fan, case, and module.

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 applications : e.g. in HVAC (Heating Ventilation and Air Conditioning) systems.

FIS has developed a new semiconductor ozone sensor using an inovative 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 is in Fig. 4.

This monitor has two models. One is for the output of 0 to 1V. The other is for 0 to 5V.

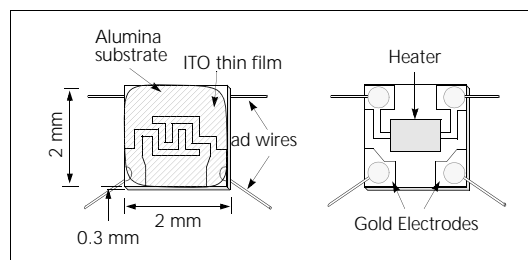


Fig. 1 Sensing Elements

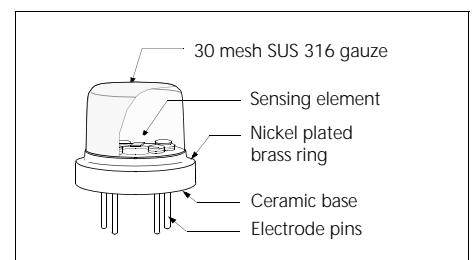


Fig. 2 Structure

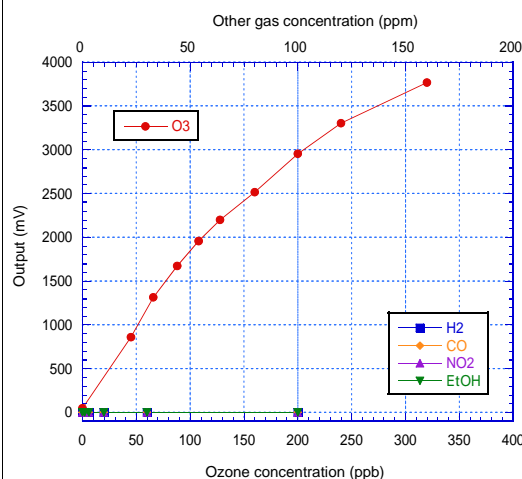


Fig. 3 Monitor sensitivity characteristics (Output range: 1 to 5V)

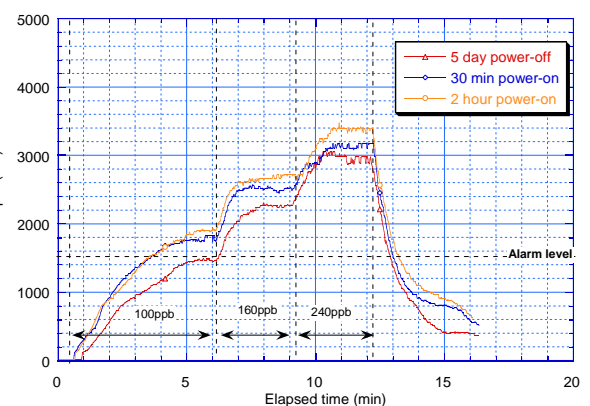



Fig. 4 Monitor Response (Output range: 1 to 5V)

## Products range of Ozone monitors

### Basic specifications

- Power supply: 5V DC  $\pm$  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: MOS 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: 64(W) x 100(D) x 36(H) mm
- Weight: 80 g

Note: Only the monitor is available.

Model	Features	Photo
A051020-SP61-01F	<ul style="list-style-type: none"> <li>• Sensor: SP-61</li> <li>• Module: A051020-SP61-01</li> <li>• Analogue output: 0 to 1V</li> </ul>	
A051020-SP61-02F	<ul style="list-style-type: none"> <li>• Sensor: SP-61</li> <li>• Module: A051020-SP61-02</li> <li>• Analogue output: 0 to 5V</li> </ul>	
I/O cables specifications  Cable color Black: GND for power supply Red: +5V DC for power supply White: Analogue output Yellow: GND for analogue output Green: Alarm output		Operation procedure 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. * When the concentration exceeds the alarm level, the alarm output (MOS) turns ON. When the concentration decreases and becomes lower than the alarm level, the alarm output turns OFF.

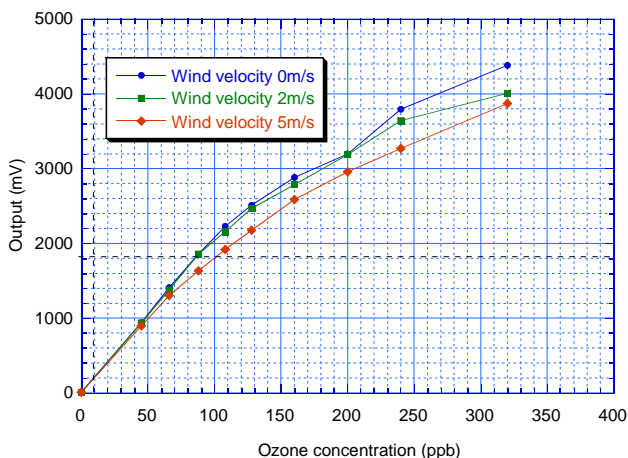


Fig. 5 Wind influence (Output range: 1 to 5V)

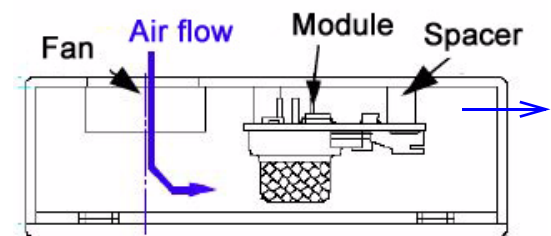


Fig. 6 Inside monitor