



## SO<sub>2</sub> Analyzer

**MODEL: Vair-9001**

## H<sub>2</sub>S Analyzer

**MODEL: Vair-9001CS**



**Both SO<sub>2</sub> and H<sub>2</sub>S are available; please specify which one is required.**

### SO<sub>2</sub> & H<sub>2</sub>S Analyzer

Vair-9001 SO<sub>2</sub> Analyzer is the analyzer that measures minimum amount of SO<sub>2</sub> in air correctly using the UV fluorescence method. The UV lamp with less change of sensitivity used for Vair-9001 was applied and the self manufactured kicker to remove the obstacle components such as HC is installed.

The Vair-9001CS H<sub>2</sub>S Analyzer operates on the principle that H<sub>2</sub>S can be converted to SO<sub>2</sub>. As the SO<sub>2</sub> molecules absorb ultraviolet (UV) light and become excited at one wavelength, the molecules then decay to a lower energy state emitting UV light at a different wavelength. Specifically:



The pulsing of the UV source lamp serves to increase the optical intensity whereby a greater UV energy throughput and lower detectable SO<sub>2</sub> concentration are realized. Reflective bandpass filters, as compared to commonly used transmission filters, are less subject to photochemical degradation and are more selective in wavelength isolation. This results in both increased detection specificity and long term stability.

All gas analyzers of Vair series were equipped with screen interface design using TFT-LCD & Touch screen so that user can operate the analyzer and maximize the visual image, and MCU applied to the analyzer is ARM11 32bit processor and operates based on Linux Kernel 2.6 which maximizes the system stability due to multiprocessing.

In addition, the analyzer is equipped with automatic zero correction system (Auto Zero) for smooth measurement and various interfaces (**Ethernet, RS232, RS485, USB, Analog out**) so that user can use it more conveniently and usefully.

### Features

- Ranges SO<sub>2</sub>:0-0.1/0.5/1ppm, user selectable.
- Ranges H<sub>2</sub>S:0-500/1000/2000ppb, selectable.
- Temperature & pressure compensation Internal zero(optional)
- In built Data Logger Utilizes NAND-Flash to Store up to 1year (1 min averaged data)
- 7inch TFT LCD & touch screen interface.
- USB interface utilizes for System Program Update.
- Stored data can be retrieved RS-232, USB Interface and TCP/IP network
- Ethernet, RS-232, RS-485 & USB ports.

# SO<sub>2</sub> & H<sub>2</sub>S ANALYZER

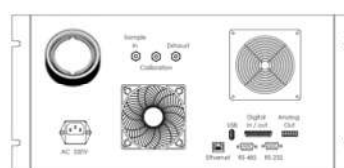
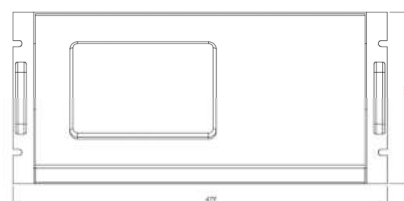
## Technical Specifications

Measuring items	SO <sub>2</sub> & H <sub>2</sub> S in Ambient Air
Measuring method	Ultraviolet fluorescent method (UVF)
Ranges	SO <sub>2</sub> :0-0.1/0-0.5/0-1ppm (Selectable)   H <sub>2</sub> S : 0-500/0-1000/0-2000ppb (Selectable)
Lower Detectable Limit	Less than 0.5ppb
Repeatability	With in ±1% of span gas concentration
Zero drift	Less than 2ppb
Span drift	With in ± 1% full scale (1 day)
Response time (95%)	Less than 90 seconds (T95)
Linearity	With in ± 1% full scale
Precision	0.5% of reading or 1 ppb
Ambient temperature	0-40°C
Analog output	0-1V/0-5V or 4-20mA (option)
Sample flow rate	Stabilized flow control by 800cc/min Critical Orifice
Particulate filter	47mm Teflon Filter
Display	7" inch Graphic LCD
Comport	Ethernet, USB2.0, RS-232, RS-485
Internal Data memory	Measuring data (1 min/1 year), Operation history, Messages, Alert
Power Requirement	220 VAC/60Hz or 230VAC/50Hz

## Ordering Information

1. Range  
0 0-0.5 ppm, 0-1 ppm (standard)  
1 0-1 ppm, 0-2 ppm
2. Power  
0 220VAC/60Hz (Standard)  
A 230VAC/50Hz  
B 110VAC/50Hz
3. Internal Zero  
0 Sample/Cal valve (Standard)  
Z. Internal zero Scrubber
4. Mountion Hardware  
0 Bench Mounting (Standard)  
H Ears & handles
5. Teflon Particulate filter  
0 Not Include (standard)  
P 1pkg

## Dimenstions - Casetype



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